

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

— — —

COMCAST CABLE : CIVIL NO. 12-859
COMMUNICATIONS, LLC, :
et al., :
Plaintiff :
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v. :
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SPRINT COMMUNICATIONS : Philadelphia, Pennsylvania
COMPANY L.P., et al., : February 14, 2017
Defendant : 9:39 a.m.

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TRANSCRIPT OF MORNING SESSION OF JURY TRIAL DAY 11
BEFORE THE HONORABLE JAN E. DUBOIS
UNITED STATES DISTRICT JUDGE

APPEARANCES:

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1 (The following was heard in open court at
2 9:39 a.m.)

3 THE COURT: Good morning, everyone.

4 ALL: Good morning, Your Honor.

5 MR. RIOPELLE: Happy Valentine's Day, Your
6 Honor.

7 THE COURT: No, I'm not your valentine, Mr.
8 Riopelle, but thank you. Be seated, everyone. I
9 have two quick issues to discuss with you, very
10 brief. First, much to our surprise, one of the
11 jurors arrived yesterday, juror number 5. I thought
12 the instructions were pretty clear. I thought I'd
13 share that with you.

14 Number two, I got your letters yesterday.
15 Very helpful. And it looks like we're going to reach
16 agreement on all of the issues. You're very close on
17 the form of the royalty question. Comcast is a
18 little shorter, easier to understand. Sprint's --
19 you picked up the Western District of Pennsylvania.
20 I don't know why we didn't pick that up, but we
21 didn't. And I think they're both very similar. And
22 I expect you to get together, and you have two hours
23 and 16 minutes to do that.

24 MR. FINKELSON: Understood, Your Honor.

25 THE COURT: And since you haven't been

1 doing anything over this long weekend, I'm sure
2 you'll have time to attend to those matters, said in
3 just. But I'd like to reach agreement on that issue.
4 Charging conference tonight. Michael, remind me to
5 cancel -- make sure we cancel the conference
6 scheduled for I think 4:45. We'll start -- take a
7 short break at the end of the trial day and then move
8 into the charging conference. I'd like to finish the
9 charge tonight. Now, I understand you have some
10 issue.

11 MR. HANGLEY: I have a letter, Your Honor,
12 relating to the question of what goes into the jury
13 room and what doesn't. You asked use to research
14 that before the charging conference. Two copies
15 sufficient?

16 THE COURT: Fine. Thank you.

17 MR. HANGLEY: Thank you.

18 MR. FINKELSON: Your Honor, we just
19 received this letter by hand a minute or so ago as
20 well, so we're still digesting it.

21 THE COURT: I'm glad the issue wasn't a
22 complicated one, Mr. Hangley. I noticed you
23 stretched the pages and barely got what you had to do
24 in three pages, a little -- a little bit on page --

25 MR. HANGLEY: There's a great deal of

1 (indiscernible), Your Honor.

2 THE COURT: Thank you for informing me, Mr.
3 Hangley. I expect you'll be wanting to write a law
4 review article on this very significant issue. I'll
5 have one of my law clerks digest the letter and then
6 we'll talk about it. I did not think the issue was
7 that complicated, but I'll certainly read the letter
8 and we'll put this on the agenda for the conference.
9 All right. Were there any other issues?

10 MR. HOFFMAN: Yes, Your Honor, we have an
11 objection to one of the demonstratives that Mr. --
12 Dr. Dippon -- or a couple of pages from the
13 demonstratives that Dr. Dippon is going to be using
14 in his direct examination. At the final pretrial
15 conference, I believe it was day two, I had raised an
16 issue about things that would be outside the four
17 corners of his -- of the expert report, and we have a
18 situation where we have a document and an opinion
19 that are outside the four corners of the expert
20 report.

21 The slides, as provided to us by counsel,
22 contain references to a 2003 SEC filing on behalf of
23 Sprint. That particular document is not cited,
24 commented, or discussed at all in Dr. Dippon's expert
25 report, yet it seems to be the new basis of his

1 opinion. And so we would seek to -- we would object
2 and ask to move to exclude the two slides that deal
3 with the SEC report. And in addition, there's a
4 third slide which appears to be a slide from Dr. --
5 Mr. Lanning's presentation, and it has a description
6 of the Sprint network and it has on it the words
7 "core network." And, apparently, it's Mr. Lanning's
8 opinion, but not Dr. Dippon. Dr. Dippon, of course,
9 is not a technical expert. He's an expert here just
10 to talk about costs. And so we would object to that
11 slide as well.

12 THE COURT: Back to the first issue, was
13 that report mentioned -- the report that you seek to
14 exclude and references to the report that you seek to
15 exclude, was the report identified at all in the
16 discovery?

17 MR. HOFFMAN: In the discovery?

18 THE COURT: In the discovery.

19 MR. HOFFMAN: During the -- during the
20 case, our expert -- our cost expert, Mr. Webber,
21 listed SEC reports from Sprint from 2003 to I believe
22 2012 as documents that he considered in his expert
23 report. That's what's listed at the back of his
24 expert report. Dr. Dippon doesn't make any mention
25 of any SEC report anywhere in his report. I was the

1 one who deposed Dr. Dippon in his deposition. I
2 certainly would have asked him about it if it had
3 been in his expert report, but it was certainly not
4 in his expert report. And I've asked counsel last
5 night to identify for me exactly where it is in his
6 expert report, and they've been unable to identify
7 it.

8 THE COURT: So, as I understand it, one of
9 your experts has identified the document --

10 MR. HOFFMAN: Correct.

11 THE COURT: -- which you seek to include.
12 Your expert listed it as one of the documents that he
13 considered in reaching his opinions?

14 MR. HOFFMAN: That he reviewed, correct.
15 Just reviewed, but yes. And Dr. -- and in response
16 to that opinion, Dr. Dippon issued an expert report.
17 His expert report makes no mention of this 2003 SEC
18 10-K, which appears, based upon the slides that we
19 have, now the complete basis for his expert opinion
20 that he's -- that he's about to --

21 THE COURT: Of course --

22 MR. HOFFMAN: -- disclose.

23 THE COURT: -- I don't recall this doctor
24 ever was presented to me. There are no -- I'm just
25 trying to recall whether there are any Daubert

1 rulings. I've issued so many opinions in the case.
2 I don't think I've read his report. I haven't seen
3 his slides.

4 MR. HOFFMAN: Well, I'd be happy to hand up
5 the slides.

6 THE COURT: You should have waited a little
7 bit later. We could have done this after the
8 verdict.

9 MR. HOFFMAN: I -- we got the slides last
10 night, Your Honor.

11 THE COURT: Oh.

12 MR. HOFFMAN: That's -- this is the
13 first they disclosed it to us, at 6:30 last night.
14 We objected. We had a meet and confer last night.

15 THE COURT: Okay.

16 MR. HOFFMAN: And Dr. Dippon is --

17 THE COURT: Well, then --

18 MR. HOFFMAN: -- about to testify --

19 THE COURT: -- under those circumstances, I
20 withdraw the comment about your tardiness. All
21 right. I might have to take this under advisement,
22 but let me hear from --

23 MR. HOFFMAN: And I'd be happy to hand up a
24 copy of his slides. They're actually very short.

25 THE COURT: Fine.

1 MR. HOFFMAN: And the slides -- specific
2 slides that we're talking about are slides five and
3 six with respect to the SEC filing, and slide seven
4 with respect to the core network document. Thank
5 you, Your Honor.

6 MR. RIOPELLE: Good morning, Your Honor.

7 THE COURT: Good morning.

8 MR. RIOPELLE: The specific reference to
9 the 10-K, which is in the slides, and I believe it's
10 at slide six of Dr. Dippon's slide deck that was
11 disclosed pursuant to the pretrial arrangements last
12 night, if you recall during Mr. Webber's examination,
13 the 10-K was brought up and was shown to Mr. Webber
14 and the jury during Mr. Webber's examination. So now
15 I'm having --

16 THE COURT: You know what, wait a minute.
17 Say that again. I was -- I was trying to read.

18 MR. RIOPELLE: Yeah, I'm sorry. During --

19 MR. HOFFMAN: It was cross-examination,
20 right?

21 MR. RIOPELLE: Yeah, it was cross-
22 examination. During Mr. Webber's -- when I was
23 cross-examining Mr. Webber, who is Comcast's cost
24 expert -- and just to set the scene, Dr. Dippon is
25 Sprints rebuttal expert to Mr. Webber. When I was

1 crossing Mr. Webber I brought up the 10-K because he
2 had listed it in his materials as something he relied
3 upon, and I asked him questions about this. I am now
4 going to -- I plan to ask Dr. Dippon questions about
5 the same 10-K. It is not the basis of his opinion,
6 as characterized by Comcast. It is a piece of
7 evidence that supports his opinion on which he was
8 questioned and asked about at his deposition. He was
9 not asked about the 10-K specifically, and the reason
10 for that is that in Mr. Webber's -- in Mr.
11 Webber's --

12 THE COURT: You can -- you can sit down
13 now. I'll let you respond.

14 MR. RIOPELLE: In Mr. Webber's opening
15 report, he did say that he left out -- he omitted
16 spectrum costs, towers, switching centers, but he did
17 not tie that to the cost-causation principle in his
18 opening report. Dr. Dippon then filed his rebuttal
19 report. It was not until Mr. Webber's reply report
20 that Mr. Webber for the first time tied the
21 cost-causation principle to the cost that he left
22 out. Dr. Dippon does not get a second report. So
23 when we're preparing for -- to cross-examine Mr.
24 Webber we had his reply report and we saw the
25 documents he relied on, in Sprint's belief counters

1 his opinion, so that's why we presented it to him in
2 open court in front of the jury, and now all I'm
3 going to do is ask Dr. Dippon about that same piece
4 of evidence. And that's why it's on there, because
5 he's testified -- it's been brought up in open court,
6 and I believe, as an expert, I mean one of the
7 reasons we don't exclude an expert's -- under Rule
8 615 is because they can hear the evidence or read the
9 evidence that comes in during trial and comment on
10 that evidence. And I will note that a very noted
11 jurist in a case called Bowersfield versus Suzuki
12 Motor Corporation --

13 THE COURT: Uh-oh.

14 MR. RIOPELLE: -- a very noted jurist said,
15 "Testimony of an expert on matters in the expert's
16 expertise, but outside of the expert's report, is not
17 only permissible at trial, but the exclusion of such
18 testimony may be reversible error. An expert may
19 testify beyond the scope of his report absent
20 surprise or bad faith." There's no surprise or bad
21 faith. I cross-examined their expert on it. And all
22 it is, the 10-K is only evidence that supports his
23 opinion. His opinion hasn't changed whatsoever. The
24 other -- the one other comment. If you look at the
25 slide deck, Your Honor, slide I believe seven --

1 THE COURT: Yes, that deals with the
2 reference to the core network, which was something
3 Mr. Lanning --

4 MR. RIOPELLE: Right.

5 THE COURT: -- added -- did he add that to
6 the --

7 MR. RIOPELLE: No, no, it was his -- do you
8 remember the board? It was his -- it was his big
9 board.

10 THE COURT: Yes. I have his slides here.

11 MR. RIOPELLE: Right. All I was doing here
12 is instead of -- because Dr. Dippon is not a
13 technical expert. Dr. Dippon is going to talk about
14 the costs, primarily the costs the Comcast left out.
15 He's just going to use this board to show which costs
16 were left out. He's not testifying about being core.
17 And the reason we didn't do a separate demonstrative
18 is the jury has seen this one. They're familiar with
19 it. I'm just -- I'm just trying to cut down on the
20 number of different depictions of the network they
21 see. He's not going to testify whether it's core or
22 not. That's not in his opinion, that's not in his --
23 he's just going to say see the person here with the
24 phone, see the tower, that's the spectrum. They
25 didn't include that. I mean that's all he's --

1 THE COURT: Mr. Riopelle, before you sit
2 down, can you hand -- do you have a copy of Suzuki-
3 Bowersfield there?

4 MR. RIOPELLE: I do. It is highlighted.

5 THE COURT: Okay. What year did I
6 decide -- I remember that case. It was a Suzuki
7 rollover case and --

8 MR. RIOPELLE: It was 2001.

9 THE COURT: I remember also that there were
10 more motions in limine filed in that case that you
11 filed in this case.

12 MR. RIOPELLE: How can that be?

13 THE COURT: I think I had a total of 30.

14 MR. GOETTLE: Mr. Riopelle, would you mind
15 just giving us the cite?

16 MR. RIOPELLE: Yeah, it is 151 F.Supp.2nd
17 625. It is Bowersfield versus Suzuki, and it was
18 2001. And do you want to look at the highlights --

19 THE COURT: All I want to see is the part
20 that --

21 MR. RIOPELLE: I just didn't want to show
22 (indiscernible) highlighted. They haven't seen it
23 before.

24 (Pause in proceedings.)

25 THE COURT: I noted I cited a lot of -- a

1 number of rather old cases. I haven't referred to
2 the DeMarinis case and Judge Ditter's opinion in
3 Kelley versus GAF in a long time. I'll hear from
4 Sprint, Mr. Riopelle. Thank you. I'm sorry,
5 Comcast.

6 MR. HOFFMAN: Thank you, Your Honor. You
7 know, the purpose of the meet confer is so that we
8 can all get each side's arguments on the table, and
9 this case wasn't presented to us last night, so we
10 can't necessarily respond to the specifics of the
11 case.

12 THE COURT: Well, the question is
13 whether -- really, the question is whether there's
14 any bad faith or whether you were caught by surprise.
15 And with a team of as many attorneys as you have,
16 surprise is a Sisyphean argument.

17 MR. HOFFMAN: Well, Your Honor, obviously,
18 we were curious to see what Dr. Dippon was going to
19 opine on. And on page five of his slide, which is
20 where he first references the 10-K, he says, "The
21 factual question is whether Sprint purchased the
22 radio spectrum and built the network to offer voice
23 data and SMS or MMS services, or whether Sprint
24 decided to offer SMS or MMS after building a voice
25 and data network is the factual question." And then

1 he has the statement, "The Sprint 10-Ks are direct
2 evidence that Sprint built the network for voice,
3 data, and SMS/MMS." And that's nowhere anywhere in
4 his expert report, and it was not a topic that we
5 deposed him on. And this, apparently, is now -- with
6 the exception of one other quote on another subject
7 from another witness, that's the entire basis of his
8 slides is this -- is now -- is this SEC document for
9 which he has no opinion on. And so from a surprise
10 perspective absolutely, from a prejudice perspective,
11 absolutely. I mean this is -- it's supposed to be
12 four corners -- its four corners, Your Honor. You're
13 under the same -- we were under the same obligations
14 and --

15 THE COURT: Well, except Webber -- well,
16 one of your experts listed it as a document he
17 referenced, and I don't quite -- I don't quite see
18 how the 10-K can do what he's -- he's going to
19 testify live, right?

20 MR. HOFFMAN: I assume Dr. Dippon is going
21 to testify live on this with respect to a 10-K that
22 we never -- he's never opined on.

23 THE COURT: All right. But you've had the
24 10-K and you relied on it. I'm going to overrule the
25 objection without prejudice to your right to object

1 to specific questions. He's going to have to lay a
2 foundation for the proposition that you really object
3 to, this last sentence on slide five. And I'm
4 referring to the sentence that begins, "The Sprint
5 10-Ks are direct evidence that Sprint built the
6 network for voice, data, and SMS/MMS." I've read a
7 lot of 10-Ks. I don't see how a 10-K can do that.
8 But I'm sure you're adept at cross-examination, and
9 we'll see whether Mr. Riopelle can lay an appropriate
10 foundation --

11 MR. HOFFMAN: And --

12 THE COURT: -- for making that statement.

13 MR. HOFFMAN: And just for clarification
14 purposes, foundation based on --

15 THE COURT: I don't know how he can say
16 that.

17 MR. HOFFMAN: Okay.

18 THE COURT: He'll have to -- there will
19 have to be a foundation for that statement, the
20 statement that the 10-Ks are evidence that Sprint
21 built the network for voice, data, and SMS/MMS.

22 MR. HOFFMAN: All right. Then I look
23 forward to him attempting to do so.

24 THE COURT: Well, he's not going to get the
25 opinion in unless he lays an appropriate foundation.

1 That's --

2 MR. HOFFMAN: Well, I --

3 THE COURT: That's even older than
4 Bowersfield, which is --

5 MR. HOFFMAN: Well, that's --

6 THE COURT: -- 16 years old.

7 MR. HOFFMAN: Right. And, Your Honor, I
8 would say that the foundation would be in hist expert
9 report, which -- for which there is no foundation,
10 and so --

11 THE COURT: Well, except it all surfaced
12 during trial and you're not caught by surprise.
13 You've got the -- you referenced -- you have the
14 10-K. Your expert referred to it in his -- in his
15 report. And I'm sure that nothing that has been
16 developed in this case during the trial came as a
17 surprise to either side because that's my impression
18 of the way you prepared this case. You prepared it
19 to the Nth degree, and I don't think there's any
20 prejudice and I certainly see no bad faith. In any
21 event, the overruling of the objection is without
22 prejudice to your right to object to specific
23 questions.

24 MR. HOFFMAN: Thank you, Your Honor. And
25 then with respect to slide number seven, which is

1 the -- Mr. Lanning's slide about core network --

2 THE COURT: Yes. He can comment on that.

3 MR. HOFFMAN: He can comment on that?

4 Okay. Thank you, Your Honor.

5 THE COURT: Well, let me -- let me qualify
6 that last statement. Mr. Riopelle said he was going
7 to refer to that slide only in the context of his
8 testimony on damages and not in any way, shape, or
9 form to establish that that is the core network.

10 MR. HOFFMAN: Thank you.

11 THE COURT: All right.

12 MR. HOFFMAN: Thank you, Your Honor.

13 THE COURT: Mr. Riopelle, do you want to
14 take your highlighted copy of Bowersfield back?

15 MR. RIOPELLE: If you would like to give it
16 back to me, relieve you of some paper.

17 (Pause in proceedings.)

18 THE COURT: We have your copy of the --

19 MR. HOFFMAN: Oh.

20 THE COURT: -- slide.

21 MR. HOFFMAN: Thank you.

22 THE COURT: When that testimony is
23 presented Sprint will present the slides. I'll get a
24 copy.

25 (Pause in proceedings.)

Dr. Cox - Cross

19

1 THE COURT: I'm looking at my deputy. Do
2 we have all the jurors?

3 COURTROOM DEPUTY: We do.

4 THE COURT: Good.

5 MR. RIOPELLE: Would you like Mr. -- Dr.
6 Cox to take the stand now?

7 THE COURT: Fine. Dr. Cox?

8 THE WITNESS: Good morning, Your Honor.

9 (Pause in proceedings.)

10 (Jury in, 10:02 a.m.)

11 THE COURT: Good morning, everyone. Please
12 be seated. I hope you had a good, long weekend and
13 got to do on Friday afternoon and over the weekend
14 and yesterday some of the things that you had to put
15 off. It's good to see all of you here so bright and
16 early. We had two legal issues that I had to address
17 and that's been completed. And now we will continue
18 with the cross-examination of Dr. Cox.

19 Dr. Cox, because it's been such a long
20 weekend, I remind you that you're under oath and the
21 record will show that Dr. Alan Cox is on cross-
22 examination.

23 THE WITNESS: Thank you.

24 CROSS-EXAMINATION

25 BY MR. Heist:

1 Q Good morning, Dr. Cox.

2 A Good morning, Mr. Heist.

3 Q When we spoke on Friday I asked you whether it
4 was your opinion that in the negotiation that Nokia
5 would have had with Sprint back in 2005, that
6 Sprint -- whether Sprint would have preferred to have
7 a lump sum paid up amount for the life of the patent,
8 and you said yes, they would.

9 A I recall that, yes.

10 Q Now, in preparing your opinion in this case, did
11 you speak to anyone at Sprint to determine whether
12 Sprint would, in face, have preferred a lump sum?

13 A Yes, I did.

14 Q Who did you speak with?

15 A I forget his name now, but I believe he was a --
16 counsel, a lawyer, a Sprint.

17 Q Mr. Harley Ball?

18 A That's correct.

19 Q So one basis of your opinion that Sprint would
20 have preferred a lump sum is because Sprint's former
21 general counsel, Mr. Ball, told you so?

22 A That was one basis. It confirmed my previous
23 understanding of this -- these sorts of situations.

24 Q Now, when Mr. Ball told you this he was talking
25 about this case in which Sprint is in the posture of

1 an infringer defendant, correct?

2 A My recollection of the conversation was that his
3 comments were more general, that it applied to their
4 preference generally for a situation dealing with a
5 continuous stream of services for a relatively small
6 amount of money.

7 Q Did he tell you when the shoe was on the other
8 foot and Sprint was a patent owner, a plaintiff in a
9 lawsuit, that it often demanded a running royalty
10 rather than a lump sum?

11 A I don't recall him telling me that, no.

12 Q Did he tell you that Sprint demanded and a jury
13 actually awarded a running royalty of five percent of
14 revenue against Vonage in the patent lawsuit that
15 Sprint filed against Vonage?

16 A We didn't discuss that case, no.

17 Q Did he tell you -- well, let me ask you this. In
18 this case, in the earlier phase of this case, when
19 Sprint had a patent that it was asserting against
20 Comcast you were the damage expert in that phase of
21 the case, correct?

22 A That's correct.

23 Q And in that phase of the case you were proposing
24 a royalty that Com --

25 MR. RIOPELLE: Your Honor, objection. He's

Dr. Cox - Cross

22

1 talking about matters in this case that are no longer
2 a part of this case.

3 THE COURT: I think I know what you're
4 talking about, but let's go to sidebar.

5 (Sidebar discussion as follows.)

6 THE COURT: I'll hear the objection, Mr.
7 Riopelle.

8 MR. RIOPELLE: The objection was irrelevant
9 and prejudicial. He is asking him about Sprint's
10 patents that Sprint (indiscernible) in this case to
11 which you granted summary judgment (indiscernible) --

12 THE COURT: In Comcast's statement?

13 MR. RIOPELLE: -- in Comcast's statement.
14 So he's bringing it up now.

15 THE COURT: Well, the issue of whether
16 Sprint prefers or preferred a lump sum royalty versus
17 a running royalty in a case where Sprint has the
18 patent (indiscernible) being sued for infringement.

19 MR. RIOPELLE: That is correct. And if he
20 wants to ask him -- I don't have a problem
21 (indiscernible) for him to ask him about previous
22 opinions that Dr. Cox may have rendered, but for him
23 to go into his lead up to his explanation
24 (indiscernible) assert a patent against Comcast is
25 getting into much bigger issues here. He can ask him

Dr. Cox - Cross

23

1 about previous opinions. He can ask him about his
2 previous opinions (indiscernible). But I don't --
3 I'm concerned with getting into so much
4 (indiscernible) --

5 THE COURT: Well, one thing that will not
6 surface in this is the fact that there was a
7 counterclaim (indiscernible) in Comcast's favor,
8 apparently.

9 MR. RIOPELLE: (Indiscernible).

10 THE COURT: But I'm not going to cut off
11 the inquiry on the subject, so cover it without
12 making reference to part of this litigation.

13 MR. HEIST: The only thing I would ask,
14 Your Honor, propose to ask, is isn't it correct that
15 in the earlier phase of this case he was asking for a
16 lump sum in one case and also an alternative running
17 royalty? He had two opinions, lump sum and running
18 royalty. And I'd like to just establish that when
19 Sprint's (indiscernible) running royalty
20 (indiscernible).

21 THE COURT: But you're mentioning this
22 case.

23 MR. HEIST: Right. I --

24 THE COURT: You're not going to do that.

25 MR. HEIST: Okay.

Dr. Cox - Cross

24

1 THE COURT: You can -- you can cover the
2 general subject, but without identifying it --

3 MR. HEIST: As part of this case.

4 THE COURT: -- as part of this case because
5 there's been a lot of litigation between --

6 MR. HEIST: Well, my next question I might
7 as well ask --

8 THE COURT: And you can leave it in there
9 by -- go ahead.

10 MR. HEIST: Another question that I would
11 like to ask, and we might as well service it now
12 because it will come up in just another second, and
13 that is in the litigation in Kansas they're assuming
14 three companies, Comcast, Time Warner Cable, and
15 Connex, and they're seeking running royalties in that
16 case. So whenever they're the plaintiffs, running
17 royalties are fine. When they're defendants, the
18 argument that we've heard Dr. Cox make, he says they
19 always prefer lump sum.

20 THE COURT: Okay. I don't think that
21 raises the same issues, but I'll hear from you on
22 that.

23 MR. RIOPELLE: Well, first of all, he's not
24 involved in that case, so he has no knowledge of that
25 case. He's not involved in that case. He's not an

Dr. Cox - Cross

25

1 expert in that case. He has no idea what positions
2 Sprint has taken --

3 THE COURT: Well, we're talking about
4 questions on the subject. I don't know whether he
5 knows or he doesn't. But I see no prejudice to
6 Sprint, whereas I do see the potential for prejudice
7 if we talk about what is happening in this case. Do
8 you disagree with that, Mr. Riopelle?

9 MR. RIOPELLE: I don't disagree, but
10 doesn't he need to lay -- before he asks the
11 questions, doesn't he need to lay a foundation as to
12 whether -- because he's on direct. No, he's on
13 cross, actually. Okay, I'm sorry. But doesn't he
14 need to lay a foundation (indiscernible) did he know
15 anything about (indiscernible)?

16 THE COURT: Yes.

17 MR. RIOPELLE: Okay.

18 MR. HEIST: What I'm hearing is if I'm not
19 going to lay that foundation, then I might as well
20 move on?

21 THE COURT: Maybe.

22 MR. HEIST: I think I'll turn around and
23 smile anyway.

24 THE COURT: That's great, Mr. Heist. I
25 have to tell you I've done that many times. I was

1 bleeding from mortal wounds that had just been
2 inflicted on cross-examination of my witnesses.

3 MR. RIOPELLE: (Indiscernible).

4 MR. HEIST: Right. Thank you, Your Honor.

5 (Sidebar discussion concludes.)

6 THE COURT: Counsel will proceed as
7 directed at sidebar.

8 BY MR. HEIST:

9 Q When you have represented plaintiff patent owners
10 in the many cases that you've worked on, you've often
11 asked for a running royalty, as opposed to a lump
12 sum?

13 A Certainly. It depends on the situation and the
14 various factors that would go into deciding whether
15 or not a lump sum would be preferable or more
16 appropriate than a royalty.

17 Q Now, another thing that Mr. Ball told you when
18 you spoke to him was that from his perspective, as a
19 licensee, he would have wanted to pay a lump sum
20 amount rather than a running royalty based on
21 Sprint's use of the invention because the lump sum
22 would have given him certainty, correct?

23 A That's one of the benefits of a lump sum payment.
24 It gives certainty to both sides.

25 Q Well, had Nokia agreed to a lump sum paid up

1 amount, and if Sprint's use of the invention over the
2 life of the patent was ultimately greater than either
3 Nokia or Sprint expected at the time of the
4 hypothetical negotiations, Nokia's royalty would have
5 been capped, correct?

6 A Sorry, could you state that again?

7 Q Had Nokia agreed to a lump sum at the
8 hypothetical negotiation, and if over the life of the
9 patent the use of the invention was greater than
10 either Sprint or Nokia would have foreseen at the
11 time, Nokia's royalty would nevertheless have been
12 capped?

13 A That's right, they would have made a deal and
14 they would have lived by it.

15 Q Right. And so in that case Nokia would not have
16 been fully compensated for all of Sprint's additional
17 infringement above and beyond what was contemplated
18 at the time, correct?

19 A That's absolutely not correct. Nokia would have
20 made a deal and they would have accepted it, and they
21 would have made a deal in their best interest
22 considering the situation at the time. In that sense
23 they would have been fully compensated, just as if I
24 buy a car and -- or sell a car and somebody manages
25 to make better use of it than I had thought that they

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1 would be able to make of it, I would still live by --
2 I would have been compensated for the market value of
3 my car.

4 Q But you wouldn't have been compensated -- Nokia
5 wouldn't have been compensated for each infringing
6 act that ultimately took place, correct?

7 A Well, I'm not sure that that's true either. I
8 mean you can go back to my example of the patent
9 that's incorporated into the tire. If somebody
10 agreed to a lump sum payment or had agreed to a
11 royalty that was based on the use of the car rather
12 than the number of times the wheels went round and
13 round, then they would have been certainly
14 compensated for the use of the patent.

15 Q Now let's go back again and try to put ourselves
16 in that room in 2005 with Nokia and Sprint and try to
17 think about what the parties were thinking about when
18 they walked into that room. During your direct
19 testimony you referred to Defendant's Exhibit 150,
20 which was the evaluation form that the Nokia manager
21 filled out about this patent. That was dated in May
22 of 1999, correct?

23 A That's correct, and that's when they rated the
24 patent as a two out of five.

25 Q Modest importance or modest --

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1 A That's --

2 Q -- strategic value I believe it was, right?

3 A That's right, modest value.

4 Q But at that time in May of 1999, there was
5 essentially no SMS and no MMS messaging at all in the
6 United States, correct?

7 A That's correct, though by 2010, when Nokia
8 actually did sell the patent, that situation had
9 changed.

10 Q Well, back in '99 though, no SMS, no MMS, as a
11 practical matter in the U.S.?

12 A Well, it wasn't widely used and commonly
13 available, that's certainly the case.

14 Q Now, in your expert report you refer to the
15 Federal Communication Commission 2008 report on the
16 state of the mobile industry, correct?

17 A I did say several, yes.

18 MR. HEIST: Can we have Defendant's Exhibit
19 33, please? I'm not sure -- I'm not sure if this is
20 (indiscernible).

21 (Pause in proceedings.)

22 BY MR. HEIST:

23 Q Doctor, let me direct your -- this is one of the
24 Federal Communication Commission reports that you
25 looked at in preparing your opinion, correct?

1 A Yes, this is the 12th report on wireless
2 communications.

3 Q And it's dated February 2008, is that right?

4 A It released -- it was released in February of
5 2008, that's correct.

6 Q Let me direct your attention to page 90. And we
7 see a table there. And if we look at the sixth
8 column over, we see wireless data revenue as a
9 percent of total service revenue. Do you see that?

10 A I do see that, yes.

11 Q And then we look down, we see that in 1998, the
12 year before and the last data that the parties would
13 have had at the hypothetical negotiation, the percent
14 of a monthly bill from a U.S. wireless subscriber
15 that was attributable to wireless data, which would
16 include, if I read this report correctly, messaging,
17 was N/A, not applicable, right?

18 A Yes, that's what it says.

19 Q And then in 1999, the year of the evaluation from
20 the Nokia manager of the strategic importance of the
21 invention, the percent of the bill rose all the way
22 up to 0.2 percent, still very small?

23 A That's correct, though what you also observe from
24 this table is that by 2006, the attributable portion
25 of SMS and MMS that the FCC at least attributed to

1 revenue had grown to 13.5 percent.

2 Q Right. And in 2005, the day of the hypothetical
3 negotiation, it was at eight percent, correct?

4 A That's right, and continued to grow after that.

5 Q Right. And in the -- in 2002 was the first time
6 it reached over one percent, correct?

7 A That's correct.

8 Q And then 2003, it doubled, correct?

9 A As a percentage, yes.

10 Q And then 2004, it doubled again, correct?

11 A That's correct. And all these numbers are baked
12 into my calculation because by 2010, of course, Nokia
13 has observed the continued growth of SMS.

14 Q So now if we -- if we go back to 2005 in that
15 conference room in Finland at the hypothetical
16 negotiation, even if neither party would have known a
17 single thing about what might happen in the future,
18 both parties would have known that messaging by that
19 time was growing very rapidly, correct?

20 A That's true, as they knew when they sold it in
21 2010.

22 Q And it's possible -- and next question, there's
23 no evidence one way or the other as to what Nokia's
24 view was of the strategic importance of its patent in
25 2005, correct?

1 A I'm not sure that I understand the question.

2 Q Well, you pointed to the invention evaluation in
3 May of 1999 from Nokia, correct?

4 A Yes.

5 Q But there's no documents, no testimony, nothing
6 in this record, that would tell us what Nokia's view
7 was in April of 2005 in that conference room
8 regarding the strategic importance of this patent,
9 correct?

10 A Well, I don't think there's any evidence that
11 I've seen that indicates that the patent made a huge
12 contribution to the improvement of SMS quality and
13 performance.

14 Q That wasn't my question though.

15 A Well, except -- well, okay.

16 Q My question was there is no evidence in this
17 record at -- one way or the other from a Nokia
18 witness or a Nokia document as to what Nokia's view
19 was of the strategic importance of its patent as it
20 walked into that conference room in Finland in April
21 of 2005, correct?

22 A Well, I guess I don't -- I'm not really sure what
23 you mean by "strategic value." I'm only talking
24 about the contribution of the patent to SMS and to
25 anybody who provides SMS services.

1 Q I'm talking in terms of strategic value as the
2 term was used in the 1999 evaluation upon which you
3 based your opinion and that you relied upon in your
4 testimony on Friday.

5 (Pause in proceedings.)

6 A Well, the testimony -- or the file says that the
7 value -- under "Value of the Invention," Nokia
8 described the strategic importance to Nokia as a two.
9 So --

10 Q That was --

11 A -- it describes --

12 Q That was 1999, correct?

13 A That's correct.

14 Q And --

15 A So under the value of the patent, it describes
16 its strategic value as modest.

17 Q That was in 1999?

18 A That's correct.

19 Q And we don't have any evidence about what they
20 thought when they walked into that conference room in
21 April of 2005 with Nokia -- pardon me, with Sprint
22 sitting in the waiting room an openly admitting that
23 it was infringing Nokia's patent, do we?

24 A Well, apart from the graph that I drew that
25 indicated that in 2010, the valuation was consistent

1 with what we see in 2009 and that a reasonable
2 inference would be to draw a straight line between
3 those two valuations.

4 Q Is it possible that by 2005, Nokia's view of the
5 strategic importance of its patent might have been
6 different than it had been in 1999?

7 A Well, I don't think the evidence supports that.
8 It's certainly possible, but I haven't -- there
9 hasn't been any explanation as to why it would have
10 changed so dramatically in 2005.

11 Q Now, I'm going to change topics for a moment.
12 Let's put on our accounting hats for a moment.

13 A Sure.

14 Q Last Friday, you testified that Ms. Riley
15 couldn't accurately apply the income approach because
16 Sprint didn't keep adequate records from which she
17 could make an accurate estimation of Sprint's
18 revenues and costs, correct?

19 A Well, and I think I would have went further than
20 that to say that it's not possible to come up with an
21 accurate valuation of the revenues that are generated
22 by offering SMS services because they're offered in
23 combination with all the other services that Sprint
24 offers.

25 Q Well, you agree, do you not, that Sprint does

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1 keep records that track how many messages were sent
2 and delivered over the damages period, correct?

3 A Certainly it does that, yes.

4 Q And there's no dispute between the parties as to
5 how many messages we're talking about?

6 A I haven't seen any dispute to that effect, that's
7 correct.

8 Q So they do keep track of how many messages were
9 sent and delivered that are the subject of Ms.
10 Riley's report?

11 A That's certainly true, but that's not the basis
12 of evaluation. The number of times something is used
13 is not the basis of evaluation.

14 Q For that, we need to look at revenue and cost?

15 A Well, you need to do more than that. You need to
16 figure out what the patent provides and how much --
17 how much people are willing to pay for that
18 attribute.

19 Q But we also -- your opinion is we at least have
20 to look at revenue and cost and then go farther?

21 A That would be one step, yes.

22 Q And last week, I understood you to say, last
23 Friday, that Sprint did not keep adequate records
24 from which Ms. Riley could accurately determine the
25 portion of Sprint's revenue attributable to

1 messaging.

2 A Well --

3 Q Was that your testimony?

4 A -- that isn't exactly what my testimony was, or
5 certainly not what I intended to say. I was just
6 saying that there are no adequate records to
7 determine what benefit is derived from using this
8 patent, just in the same way is when you use a
9 patent -- going back to my patent on a tire analogy,
10 there's no -- there's nothing in the record that
11 would be equivalent to determining what benefits
12 arise from incorporating the patent into the tire. I
13 mean supposing the patent made the care go faster and
14 was more stable, you would want to know how much
15 faster or how much more stable and how much people
16 are willing to pay for that additional speed or that
17 additional stability. There's nothing like that in
18 the record -- in Ms. Riley's report or in the record
19 here.

20 Q Thank you for that explanation, Doctor. My
21 question doesn't have anything to do with tires and
22 it doesn't have anything to do with the patent. It
23 doesn't have anything to do with value. It has to do
24 with the simple question of whether the records that
25 Sprint provided to Comcast in this case gave Ms.

1 Riley the ability to determine the messaging revenue
2 that Sprint enjoyed over the damage period.

3 A Well, I would say this case has everything to do
4 with the value, but certainly the value -- the
5 revenue that was being generated from the provision
6 of SMS is something that I do not think we really
7 know.

8 Q And the reason that you gave on Friday was
9 because Sprint for a time -- sometimes in the damage
10 period started to provide customers with bundled
11 plans that gave them voice, data, and messaging all
12 for one price, is that right?

13 A That's correct. That's a manifestation of the
14 way telecommunication services are being offered now.

15 Q And you suggested to the jury that Sprint itself
16 has no way to unbundle the revenue that it receives
17 from its subscribers so that it can isolate the
18 messaging revenue from the data revenue and the voice
19 revenue?

20 A Well, I didn't say they have no way. All I said
21 was that there wasn't any evidence in the case that I
22 had seen that provided an acceptable way, an
23 economically and financially acceptable way, of
24 unbundling the benefits of the messaging.

25 Q All right. One of the things that you considered

1 in connection with your opinion was the testimony of
2 a gentleman named Sean Wilson, deposition testimony,
3 correct?

4 A That's correct.

5 Q And I'd like to show you Plaintiff's Exhibit 77.
6 This is one of the documents that both you and Ms.
7 Riley relied upon, or reviewed anyway, in connection
8 with your opinions, correct?

9 A I don't recognize it, but I'll -- it certainly
10 would be -- that looks consistent with the sort of
11 thing that we looked at.

12 Q This document was the subject of testimony from
13 Mr. Wilson, who was Sprint's corporate designee about
14 subject matter of this particular document and
15 others, correct?

16 A Yes.

17 Q Let me show you a transcript of Mr. Wilson's
18 deposition.

19 (Pause in proceedings.)

20 Q And I'd like to go through this document with you
21 regarding his testimony about this document, which
22 was marked at his deposition as Deposition Exhibit
23 11. Now, let's begin on page 171 of his transcript.
24 Line 21, Mr. -- we'll mark that as Exhibit 11, Wilson
25 Exhibit 11, and you can see that in the bottom, right

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1 of the exhibit, correct?

2 THE COURT: When was the deposition taken?

3 MR. HEIST: December 19th, 2014, I'm told.

4 My copy doesn't have the cover page.

5 BY MR. HEIST:

6 Q So let me direct your attention starting at line

7 24 to the notes column on page one.

8 A Of the exhibit?

9 Q Yes. And we went down and we -- and we -- I
10 directed the witness' attention to code LDT1007. Do
11 you see that number there?

12 A I see it on the screen. Did you want me to look
13 at the transcript also?

14 Q Well, let's keep going. Let's look at the
15 transcript, line six,

16 Question: "And that corresponds to a plan
17 family called EDS1500? Do you see that?"

18 Answer: "Yes."

19 Question: "And what's that?"

20 A Sorry. What page?

21 Q Answer -- pardon me?

22 A I'm sorry, which page are you reading from?

23 Q I'm at page 173.

24 A Okay.

25 Q And the answer was,

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1 Answer: "That's everything data share."

2 Question: "Everything data share 1500.

3 And the MRC, that is the monthly recurring charge,
4 for that plan on this document is \$149.99?"

5 Answer: "Yes."

6 Question: "And Sprint allocated \$69.99 of
7 that amount to the voice component of the bundle,
8 correct?"

9 Answer: "Yes." And you see in the column
10 under "voice" \$69.99. Do you see that?

11 A Yes, I do see that.

12 Q And it allocated \$30 to the text component of the
13 bundle, correct?

14 A That's what it shows on the exhibit.

15 Q Then -- and the answer is,

16 Answer: "That's certainly the way I read
17 those first columns."

18 Question: "And it allocated \$30 to the
19 data component of the bundle, correct?"

20 Answer: "Yes. Yes."

21 Question: "And it allocated \$20 to the
22 premium data add on, correct?"

23 Answer: "Correct."

24 Question: "Then it did it in terms of
25 percentages in the next column. It allocated 47

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1 percent of those amounts to the voice component of
2 the bundle, correct?" You see the 47 percent within
3 the "Percentage" column on the exhibit?

4 A I think you're asking me, and the answer is yes,
5 I do.

6 Q And the witness continues,

7 Answer: "I think it's just math at that
8 point, but yes."

9 Question: "And 20 percent of the bundle
10 was allocated to text, correct?"

11 Answer: "Correct." We'll skip the
12 objections and go on to line 20.

13 Question: "In the column under 'Text' it
14 says '20 percent' referring to LDT -- pardon me,
15 LTD1007, correct?"

16 Answer: "Yes." Continuing, line 25,

17 Question: "That means Sprint allocated
18 \$30, or 20 percent of the value of the bundle, to the
19 tax component, correct?"

20 A Oh, that's what you're reading --

21 Q That's where I'm referring you. They allocated
22 20 percent of that \$149 that they charged customers
23 under that plan to text, correct?

24 A Yeah, that was what their allocation was based on
25 some accounting formula, not necessarily based on

1 causation.

2 Q Let me direct you to page 175 of the transcript
3 beginning at line 12,

4 Question: "And it did it for tax reasons?"

5 Answer: "That's my understanding."

6 Question: "So what tax reason would that
7 be?"

8 Answer: "So different municipalities have
9 different taxes on the services, like mobile internet
10 is the big one, I mean and prior to creating these
11 types of plans, is a more straightforward of a mobile
12 internet would be, you know, the data add ons. So
13 the tax rate for mobile internet in that municipality
14 would be applied against that MRC," stands for mobile
15 recurring charge. "When we created the bundle plans
16 we certainly felt, you know, we didn't want to remit
17 too much to the state, so we didn't want to have to
18 pass -- to have our customers remit too much to
19 Sprint, so we needed to make, you know, some
20 reasonable allocations for the purposes of, you know,
21 applying that tax rate appropriately for the
22 different municipalities." Do you see that?

23 A Yes, I do see that.

24 Q So when Sprint wants to unbundle its plans for
25 tax reasons so -- as Mr. Wilson testified, so it

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1 doesn't remit too much money in taxes to the state,
2 it knows how to do it, doesn't it?

3 A Well, it certainly has some method for
4 allocation. It was based on the agreement made up
5 amongst the different people or different product
6 managers who were responsible for different
7 components of the services provided to Sprint, and
8 they came up with what they felt was reasonable for
9 tax purposes. But that doesn't come -- rise to the
10 level of evaluating a piece of intellectual property
11 for the purposes of calculating a reasonable royalty.
12 It's just an allocation exercise, basically an
13 agreement.

14 Q It's an agreement among Sprint's employees
15 responsible to make sure that they're complying with
16 the tax regulations of the municipalities in which
17 they do business, correct?

18 A That's correct, though it's an agreement that
19 they come up with based on their inability to
20 calculate exactly how much revenue is derived from
21 providing SMS services, as opposed to other services.

22 Q So when Mr. Wilson said this was a reasonable
23 allocation do you agree with him or disagree?

24 A I don't have an opinion one way or another, but I
25 don't -- I don't know how he did the allocation, but

1 if he didn't do it in the manner that would be
2 appropriate for valuation purposes, then I don't
3 think I would agree with it as being appropriate for
4 calculating a royalty in this matter.

5 Q So you're saying it was inappropriate for Ms.
6 Riley to rely upon the allocations that Sprint makes
7 for tax purposes?

8 A We have no testimony as to how they did that
9 allocation, whether it was putting their fingers to
10 the wind or whether there was sort of rigorous
11 statistical or economic analysis.

12 Q You're saying Sprint put its finger to the wind?

13 A No. No, that wasn't what I said. I said we
14 don't have any evidence as to what they did in order
15 to come up with this allocation. My recollection
16 from reading the testimony of Mr. Wilson and others
17 was that it was basically an agreement that was made
18 based on their judgment, but not based on any
19 rigorous analysis.

20 Q Now, on Friday, I also understood you to say that
21 Ms. Riley did not accurately calculate the cost
22 associated with messaging.

23 A That's correct.

24 Q But Sprint has produced documents in this case
25 showing that it did track some costs for messaging

1 services, correct?

2 A That's correct, and my criticism is that she
3 didn't take into account the fully -- the full cost
4 of providing SMS services in combination with all the
5 other services that Sprint provides.

6 Q In applying the income approach, Ms. Riley
7 calculated Sprint's messaging profit margin using
8 Sprint's costs derived in the ordinary course of
9 business from Sprint's own documents, correct?

10 A Well, I'm not sure whether she did use documents
11 that were generated in the normal course of business,
12 but if -- they also have to be examined for whether
13 or not they're complete and make economic sense.

14 Q Whatever they were, they're complete enough for
15 Sprint to run its messaging business, correct?

16 A That's correct. Whether or not it's appropriate
17 for evaluation is another question.

18 Q Now, in her opinion, the margin that she
19 calculated on messaging using the revenue that she
20 derived in part from Sprint's records and the costs
21 that were derived in part from Sprint's records, the
22 margin that she computed was 53.8 percent on
23 messaging, correct?

24 A That's her margin, yes.

25 Q And you say that in calculating that margin, she

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1 didn't apply the correct definition of costs,
2 correct?

3 A She didn't incorporate all the costs to either
4 calculate that margin or compare it with --
5 appropriately with Sprint's other -- the margin it
6 makes on other products.

7 Q And you say that the costs that she relied upon
8 were too low, and, therefore, that the margin that
9 she computed was too high, correct?

10 A That would be one of my concerns with that, yes.

11 Q Now let's go back to Exhibit -- Defendant's
12 Exhibit 33 that we looked at a moment ago. That's
13 this report from the Federal Communications System --
14 or Commission, excuse me, in 2008. And let's go to
15 page 91.

16 (Pause in proceedings.)

17 Q Paragraph 203. The report states, "Morgan
18 Stanley further notes that wireless data services
19 often have much higher gross margins than voice and
20 that text messaging is believed to be the most
21 profitable with margins of 90 percent or more. Do
22 you see that?

23 A I do see that with reference to gross margins.

24 Q So in this report prepared by the federal
25 government, the Federal Communications Commission, it

1 was noted at least at this point in time in 2008 that
2 text messaging margins were believed to be 90 percent
3 or more, correct?

4 A Remember, those are gross margins, so those do
5 not include all the costs of providing SMS services,
6 as it says right there on the -- on the text.

7 Q Ms. Riley determined the margin for Sprint to be
8 53.8 percent.

9 A That's correct. So -- that's a great point.
10 Here, they're talking about gross margins without any
11 of the operating costs included -- or deducted from
12 revenue. Ms. Riley did include some costs, not all
13 of the costs, and then compares her margins with
14 these margins. Well, of course she came up with a
15 lower margin, 53 percent, after deducting more costs
16 than Morgan Stanley did, so of course she's going to
17 get a much lower number than Morgan Stanley came up
18 with.

19 Q So you think her 53.8 percent margin calculation
20 was too high?

21 A Well, I don't have an opinion as to whether it
22 was too high or not. All I'm saying is that not all
23 the costs were used in calculating that, so,
24 therefore, it was too high.

25 Q And you provided no alternative number, margin

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1 calculation, for this jury, correct?

2 A That's correct, because I wouldn't have done an
3 evaluation in this way.

4 Q Now, one of the main costs that you say that Ms.
5 Riley omitted was spectrum costs, correct?

6 A That's correct.

7 Q So let's take off our accountants hats for a
8 moment and we'll put on our engineers hats. Could
9 you tell us what you understand spectrum to be?

10 A Well, spectrum is the radio magnetic spectrum
11 that in this case is being allocated to the use of
12 cellular service.

13 Q Well, electromagnetic spectrum, that's just a
14 frequency, right?

15 A Well, that -- it's measured -- the portion of the
16 spectrum that you're taking is measured in frequency.

17 Q And those are sometimes called the air waves,
18 right?

19 A Yes.

20 Q And the air waves are public property, correct?

21 A Well, they're public property that is sold or
22 controlled by the federal government or various
23 government agencies, and then licensed out to
24 companies for their use or allocated in some cases to
25 public agencies for their use.

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1 Q So the actual spectrum is owned by the federal
2 government, but companies like Sprint can go to the
3 federal government and get the right to use a
4 particular frequency, correct?

5 A Right. They pay billions and billions of dollars
6 in license fees for the right to use that spectrum.

7 Q So to put it in terms that people understand here
8 in Philadelphia -- and we have a radio station that's
9 been around as long as I've been around, KYW 1060 AM.
10 So the owners of that station go to the Federal
11 Communications System and they pay money for the
12 right to broadcast at the frequency of 1060 I think
13 it's kilocycles per second. I forget. But it's --
14 that frequency is what they essentially rent from the
15 government, correct?

16 A Yeah. I'm not exactly sure whether -- you know,
17 what -- how the portion of the band that goes to
18 radio stations is licensed, but --

19 Q But --

20 A -- it is certainly controlled by a federal
21 agency, yes.

22 Q So if you're Sprint and you want to go into the
23 wireless business, you have to go down to the Federal
24 Communications System and they sell you the right to
25 use the frequency band that you want to use or they

1 want to use for money, correct?

2 A Yes. You know, it's a complicated process. The
3 federal government auctions it off, but you can also
4 buy and sell spectrum from other people who have
5 taken licenses out of part of the -- out of part of
6 the spectrum.

7 Q So let's put our accountants hats back on for a
8 moment. And let's assume that we're going to start a
9 phone company, you and I, and we're going to buy the
10 rights to use some spectrum.

11 (Pause in proceedings.)

12 Q And so we raise some money. Let's say we raise
13 \$20 billion for stock from a stock offering, so we
14 have \$20 billion to start with.

15 A Okay.

16 Q That's a pretty good -- pretty good day to start
17 with \$20 billion. So my handwriting isn't as good as
18 my partner's, Mr. Goettle's, so I -- we prepared this
19 consolidated statement of operations. That's a
20 balance sheet. And --

21 A That's an income statement.

22 Q Or an income -- sorry, I got the wrong one.

23 Let's put the balance sheet here. And I put FASB
24 rules. Do you know what the FASB rules are?

25 A It's the Federal Accounting Standards -- Federal

1 Accounting Standards Board.

2 Q Okay. So when we get the stock in -- the money
3 in for the stock we have current assets. We'll put
4 down cash, \$20 billion, okay?

5 A Okay.

6 Q And now we're going to go and we're going to get
7 some spectrum from the Federal Communications System.
8 And let's assume that the spectrum costs \$18 billion.
9 So we'll cross out the 20 and we'll put in two, and
10 we got \$18 billion that we're going to give to the
11 FCC, and they're going to give us a bag of spectrum.
12 It's intangible. And we come back and we now have
13 this right that we need to get into business. Where
14 do we put the \$18 billion in spectrum on the balance
15 sheet?

16 A Well, I guess I would put it either in property,
17 plant, and equipment or intangible assets. I don't
18 know what the rules are.

19 Q There -- these are accounting rules?

20 A Right.

21 Q So could we put it under intangible assets
22 because the spectrum, after all, isn't something that
23 we can touch or pick up or put in the bag; it's just
24 a right?

25 A Well, you know, that's an interesting question.

1 I don't know -- I mean I could -- I could think of a
2 reason why you wouldn't put it in there, something
3 that's clearly defined, something that you clearly
4 have a right to, as opposed to goodwill or know-how,
5 which is usually what we would describe as an
6 intangible asset.

7 Q I'll put it wherever you want it. You tell me
8 where to put it.

9 A Well, let's put it under -- let's put it under
10 intangible assets then.

11 Q Okay. So I'm going to write down "Spectrum" -- I
12 apologize for my handwriting -- "\$18 billion." And
13 since we're just starting the business, we don't have
14 any liabilities, right?

15 A Well, apart from the stockholder's equity.

16 Q So the stockholder's equity is \$20 billion,
17 right?

18 A Yes.

19 Q So down here, we'll put down "\$20 billion." So
20 the stockholders are still pretty happy with us
21 because they started with \$20 billion and they still
22 have \$20 billion, right?

23 A Yes.

24 Q So we've listed the spectrum under the "Assets"
25 column, right?

1 A Yes.

2 Q And assets generally are a good thing.
3 Liabilities are the bad thing. But at the beginning
4 of our business, all we have right now are two
5 assets, \$2 billion in cash and \$18 billion in
6 spectrum?

7 A Yes.

8 Q All right. Now, there's another type of document
9 that accountants keep. Sorry, I was told that you
10 couldn't see this. So I put \$20 billion under
11 shareholder's equity, and the current liabilities at
12 the moment are zero. So there's another type of
13 document that accountants keep in addition to a
14 balance sheet called a P&L, profit and loss
15 statement, correct?

16 A Yes.

17 Q All right. So I'll do this because my
18 handwriting is so poor and I realized I misspelled
19 "FASB rules," for which I apologize. So now we're a
20 year into the business and we have revenue coming in
21 from our subscribers, and let's say that revenue
22 that's coming in is \$1 billion. So I'll put down "\$1
23 billion" here in revenue. Where do I put the cost of
24 the spectrum on the income statement, the P&L
25 statement?

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1 A Well, one thing you could do, certainly -- well,
2 in a P&L -- so these are -- when you say operating
3 expenses, just to make sure we're talking about the
4 same thing, this is more than just cost of good sold?

5 Q Somewhere -- if there's a cost --

6 A Uh-huh.

7 Q -- it should show up on this statement. I don't
8 know where you put it, but if there's a cost of the
9 spectrum, it's got to show up on there, doesn't it?

10 A Well, if you fully depreciate it, as you should,
11 over time, then it should appear as a depreciation
12 factor that you subtract from revenue.

13 Q Well, let's say it depreciates ten percent.

14 A Okay.

15 Q I'll just make it up. So we paid \$18 billion and
16 it depreciates \$1.8 billion. So we'll put -- is that
17 right?

18 A We pay 18 -- sure, that sounds good.

19 Q So we'll put "\$1.8 billion." That means if we
20 subtract -- the income, we received \$1 billion, and
21 from that we subtract the depreciation, or the cost,
22 we're in the hole? We've lost money?

23 A That's correct.

24 Q All right.

25 A Because we still haven't -- and we still haven't

1 subtracted our operating costs here --

2 Q Right.

3 A -- our cost of good sold.

4 Q And there's even more costs. So we're --

5 A Right.

6 Q -- in deep trouble after one year?

7 A I should never have gone into business with you.

8 Q Or I with you. Well, now, let's keep our
9 accountants hats on for a moment and talk about how
10 Sprint keeps its books and records. Sprint files a
11 document each year with the Securities and Exchange
12 Commission called a 10-K, correct?

13 A That's correct.

14 Q And that 10-K form that they submit every year
15 lists the results of their operations, their costs,
16 tells the people -- the public lots of things about
17 the company, right?

18 A That's correct.

19 Q And it's a pretty important document, isn't it?

20 A Yes.

21 Q Because it's a document that the public relies
22 upon, the shareholders, the investors. Everybody
23 relies upon that document to understand how Sprint is
24 doing, correct?

25 A That's correct.

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1 Q And the documents -- the 10-K forms are prepared
2 and audited by the public accounting firms to make
3 sure they're accurate, correct?

4 A That's right, though let's be clear about what
5 that means. They're accurate and they're consistent
6 with accounting rules that have been set up by FASB
7 and other organizations. They don't necessarily
8 speak to or are consistent with the way you would do
9 a valuation.

10 Q All right. And this is a really important point.
11 Accounting rules have to -- accountants have to file
12 accounting rules, right?

13 A That's right, and certainly in publishing a 10-K.

14 Q Like FASB rules, for example?

15 A That's correct.

16 Q Accountants have to follow those rules.
17 Economists don't, right?

18 A That's correct. And financial analysts as well.
19 When they're doing stock reports they frequently take
20 these reports, these 10-Ks, and realign the numbers
21 so that they are more appropriate for -- when they're
22 taking a valuation and giving advice to their
23 subscribers as to what stocks to buy.

24 (Pause in proceedings.)

25 Q I'd like to show you what we marked as

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1 Plaintiff's Exhibit 908, which is the Form 10-K that
2 was filed by Sprint Nextel Corporation in 2005, the
3 year of the hypothetical negotiation. And I think
4 it's worthwhile going through and see how well we did
5 as amateur accountants. So let's look at the first
6 page.

7 MR. HEIST: 908?

8 BY MR. HEIST:

9 Q So that's the 10-K and we can see that it's -- I
10 think we can see the year, December 31, 2005. So
11 let's go to page 83. I think that's 82. There we
12 go. That's the signature page, correct?

13 A Yes.

14 Q And this document was signed by the Chief
15 Executive Officer, the Chief Financial Officer, and
16 the Principal Accounting Officer, correct?

17 A Yes.

18 Q Let's go to the next page, page 84, and we'll see
19 that it was signed by what appears to be all but one
20 of the members of the board of directors of Sprint
21 Nextel, correct?

22 A Yeah, I presume that's the entire board.

23 Q And let's go to page 908 -- pardon me, Exhibit --
24 pardon me, page 89 of this exhibit.

25 MR. HEIST: It's 89, Mr. Dyer. There we

1 go.

2 BY MR. HEIST:

3 Q And that's the report of the certified public
4 accountants that signed off on this document,
5 correct? KMPG (sic)?

6 A That's correct.

7 Q All right. Now let's go to the balance sheet.
8 That's page 94. And here, we see assets at the top,
9 liabilities in the middle, and shareholder's equity
10 towards the bottom, correct?

11 A Yes.

12 Q Now let's look under the "Asset" column. Go down
13 to intangible assets, and we see "FCC Licenses, \$18
14 billion," right?

15 A Yes, I see that number. I can't see what the
16 heading is, but I presume that that's for December of
17 2005.

18 Q All right. So FCC licenses include the spectrum,
19 so we did a pretty good job in our earlier balance
20 sheet. We got it in the right spot. It's an asset,
21 not a liability, correct?

22 A That's correct.

23 Q Now, let's go to the notes to the financial
24 statement and see how they treat spectrum. I'm going
25 to direct your attention to page 104.

1 Q We'll blow up intangible assets, and it says, "In
2 conformity with SFAS Number 142, goodwill and other
3 intangible assets, we do not amortize our indefinite
4 life intangibles, which consists of our Federal
5 Communications Commission, or FCC, licenses." Do you
6 see that?

7 A I do see that.

8 Q And amortization is sort of another word for
9 depreciation when you're talking about an intangible
10 asset like an FCC license, correct?

11 A That's correct, though, you know, that's not the
12 only cost of having an asset. You have to pay a
13 return on that asset. We'll come to that in a
14 moment. I just want to go through the accounting
15 rules. Sprint is telling the investors and the
16 investing public and the SEC that they don't take any
17 I'll call it depreciation deduction for spectrum,
18 right?

19 A That's correct, and they're also telling
20 investors that if you want to do an accurate
21 evaluation of the way we run our business and the way
22 we generate margins, you would have to take that into
23 account --

24 Q Okay.

25 A -- and make an adjustment accordingly.

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1 Q Okay. But if we went to their depreciation line
2 in the balance sheet, there's no depreciation cost
3 associated with the license.

4 A That's the way they interpret the accounting
5 rules.

6 Q And that's the way AT&T and Verizon account --
7 follow the accounting rules too, isn't it?

8 A That's right, but when they do an economic
9 evaluation of the cost of holding spectrum that's not
10 what they do.

11 Q Right now, we have our accountants hats on,
12 Doctor, don't we?

13 A Well --

14 Q It's hard to keep track of which we are at the
15 moment, but right now, we're accountants, you and I,
16 and we're trying to apply the FASB rules, the
17 accounting rules, that Sprint is obligated to follow
18 when it submits its form to the SEC. They don't list
19 spectrum, the \$18 billion, as a cost and they don't
20 depreciate it. Isn't that what this says?

21 A That's correct. I was just make a side comment
22 on a rule that indicates how one should properly
23 treat this information.

24 Q Let's go to page 119 because there they tell us
25 why they don't depreciate the spectrum. Let me

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1 direct your attention to the sentence that begins,
2 "That spectrum is not -- is a renewable, reusable
3 resource that does not deplete or exhaust over time."
4 I guess we should highlight the previous sentence.
5 "Spectrum licenses authorize wireless carriers to use
6 radio frequency spectrum, and that spectrum is a
7 renewable, reusable resource that does not deplete or
8 exhaust over time." Do you see that?

9 A I see that. Let me just read the rest of the
10 paragraph so I don't miss anything here.

11 (Pause in proceedings.)

12 A That's what it says, certainly.

13 Q So let's go back to our business balance sheet,
14 the one you and I created. Let's go back to the
15 document camera. So we put in here depreciation,
16 \$1.8 billion, and that turns out to be wrong. The
17 depreciation, according to Sprint, is zero.

18 A Well, that's -- their amortization is zero, but
19 that doesn't mean the cost of holding that asset is
20 not more than zero.

21 Q But what they report to the investors and the
22 shareholders and the analysts is that the
23 depreciation, or amortization, cost for that \$18
24 billion in spectrum is zero, correct?

25 A That's what they're -- that's what they're saying

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1 when they explain how they do their sums. But the
2 analysts who are reading it and the shareholders are
3 expecting to get a return from the investment that
4 they made and the money that they made -- or the
5 money that they gave the telephone companies.

6 Q Right. They would like to get a return on that
7 money --

8 A That's right. There's an --

9 Q -- but at --

10 A -- opportunity cost to holding that spectrum.

11 Q But at any time that Sprint wants to sell or turn
12 back its spectrum it can do it and get back its \$18
13 million because it's still right there in the balance
14 sheet where it always was, isn't that right?

15 A That's exactly my point. There's an opportunity
16 cost to holding that spectrum. If they've got that
17 spectrum -- \$18 billion tied up in spectrum, they
18 either have to use it as they always planned to use
19 it, for texting, data, and voice, or they have to
20 sell it back to somebody else -- or they could try to
21 sell it to somebody else and keep the money for
22 themselves and give the money to their shareholders.
23 There's a cost to keeping that spectrum for use in
24 texting.

25 Q Any economist would say that, wouldn't he?

1 A An economist. Any accounting would tell you that
2 was the truth also, but they --

3 Q Well, tell --

4 A -- when they are putting on their accounting hats
5 to comply with the rules this is what they do.

6 Q All right.

7 A And when we do the valuation we do a more
8 comprehensive and complete analysis.

9 Q Let's take on our economist hat and put up
10 there -- we'll put our accounting hat back on. I'm
11 going to ask you to go through this 10-K and show me
12 where the opportunity cost is listed in the 10-K.

13 A Well, I'm not sure if I could find that, but that
14 doesn't mean that there aren't a lot of things in the
15 10-K that may be consistent with accounting rules,
16 but which we have to make adjustments for when we're
17 figuring out what the valuation is. After all,
18 there's a whole industry out there that does nothing
19 but convert information in 10-Ks and annual reports
20 to something that people can act on in making their
21 investments.

22 Q Right. And they tell the public that we don't
23 depreciate the licenses. They're listed right there
24 and the license is listed as an asset, but the
25 opportunity cost is never anywhere listed in the

1 10-Ks that are reported to the government, never
2 listed as a cost, because that is an economist's
3 view, not an accountant's view of the world, isn't
4 that right?

5 A Well, I don't know if accountants seek
6 opportunity cost, but I would take your word for it
7 that they don't talk about it in the 10-K.

8 Q It's not there, is it?

9 A But that's why we have analysts to put it back
10 in.

11 Q Let's go on to the market approach. The market
12 approach values assets based on comparable
13 transactions, correct?

14 A That's correct.

15 Q And you agree that it's a possible approach for
16 valuing a patent? In fact, it's the one that you
17 used in this case?

18 A That's correct.

19 Q Now, the transaction that you identified as
20 comparable to the hypothetical negotiation that would
21 have taken place in 2005, the one that you say is
22 comparable is the 2010 agreement by which Comcast
23 purchased the patent from Nokia, correct?

24 A Yes.

25 Q Now, on Friday, you testified that Ms. Riley

1 refused to take that patent purchase agreement into
2 account?

3 A Well, yeah, that's correct. That's what I
4 testified to.

5 Q But you know that she considered it in her expert
6 report and she put a slide up regarding it in her
7 presentation, correct?

8 A That's right, she rejected it for reasons that I
9 don't think are valid.

10 Q But she didn't refuse to consider it? She read
11 it and considered it, but gave it a different
12 valuation than you did?

13 A Yes.

14 Q By the way -- well, let's look at the
15 circumstances of those two transactions that you say
16 are comparable, the 2005 transaction between Nokia
17 and Sprint, hypothetical transaction, and the 2010
18 actual transition -- transaction between Nokia and
19 Comcast.

20 A Yeah, I think it's appropriate to do that
21 comparison. You have to make some adjustments.

22 Q Now, the law requires us to assume that at the
23 time of the 2005 transaction, had Sprint come to
24 Nokia to seek a license, the parties would have
25 agreed that the 870 patent was valid, correct?

1 A That's correct, and I adjust for that.

2 Q And the law also requires to assume that in 2005,
3 Nokia and Sprint would have agreed that Sprint was
4 infringing the patent, correct?

5 A That's correct.

6 Q In contrast, when Comcast came to Nokia in 2010
7 to buy the patent neither party would have known for
8 certain whether the patent was valid or not?

9 A That's correct. Now, the record also indicates
10 that Comcast thought it had a good patent or the 870
11 was a good patent in those terms.

12 Q But in 2005, the law requires us to assume that
13 the parties noted with certainty that the patent was
14 valid, whereas in 2010, there was at least a
15 possibility for a question about that?

16 A That's right, and that's one of the things the
17 law requires us to make an adjustment for.

18 Q And there's no fact of record that in 2010,
19 either Comcast or Nokia believed, let alone knew for
20 certain, that Comcast was infringing the patent,
21 correct?

22 A That Comcast was --

23 Q Yeah.

24 A Sorry, I guess I thought you were going sort of a
25 different place with that question, so could you

1 start it again?

2 Q There are no facts of record to suggest that in
3 2010, either Comcast or Nokia believed, let alone
4 knew for certain, that Comcast was infringing the 870
5 patent, correct?

6 A I haven't seen any reference to that in the
7 record, that's correct.

8 Q And in 2010, when Comcast came to Nokia to
9 purchase the patent there was no certainty as to
10 whether Sprint or anyone else was infringing the
11 patent, correct?

12 A Well, there is an appendix to the contract or the
13 purchase agreement that identified people who were
14 not licensees. But, of course, even those people
15 being identified doesn't indicate that they knew for
16 certain that they were infringers, that's correct.

17 Q Okay. So one big difference between 2005 and
18 2010 is that in 2005, the hypothetical negotiation,
19 both sides knew the patent was valid and infringed
20 and Sprint needed a license, correct?

21 A That's correct.

22 Q And in 2010, when Comcast came to Nokia there was
23 no certainty that anybody was infringing and there
24 was no certainty as to whether the patent was valid?

25 A That's correct. That's always the case when

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1 you're doing a comparable analysis in a patent case.
2 You have to make an adjustment for that difference
3 because that difference always exists.

4 Q And there's no reason to believe in 2010, that
5 Comcast believed it needed a license in order to go
6 into the messaging business?

7 A I don't remember what the record says about that.

8 Q You can't point to any facts, sitting here today,
9 that suggest that Comcast, in 2010, was planning on
10 using the patent to go into the business?

11 A I think that's fair.

12 Q But in 2005, at the time of the hypothetical
13 negotiation, Sprint was already in the business and
14 it needed a license in order to stay in the business,
15 isn't that right?

16 A Well, apart from the fact that they may have been
17 able to utilize a non-infringing alternative, they
18 certainly did need to -- as far as I know, they did
19 need to use the patent.

20 Q There's no -- no one has testified to any
21 non-infringing alternatives in this record at this
22 trial?

23 A That's correct.

24 (Pause in proceedings.)

25 Q Now, there are facts of record to suggest that

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1 shortly after Comcast purchased the patent, questions
2 were raised about whether the patent was valid or
3 not?

4 A Well, I think the testimony in this case is that
5 even going into the negotiation, Comcast had some
6 concerns about that, but they acted on them after
7 they purchased the patent.

8 Q After they patent -- they purchased the patent,
9 they went back to the Patent Office and they said,
10 ladies and gentlemen of the Patent Office, there are
11 new questions of patentability regarding this patent.
12 We would like you to consider them.

13 A Right, though I think the record shows they were
14 confident that they were going to overcome those
15 concerns.

16 Q Right. But they -- their -- those concerns were
17 picked up by the Patent Office and the Patent Office
18 said to Comcast, yes, you are correct, there are new
19 questions and we're going to take another look at
20 this.

21 A That would be my -- consistent with my
22 understanding, yeah.

23 Q Nothing like that was on the table when the
24 parties met in 2005 or would have met in the
25 hypothetical negotiation in Finland, right?

1 A That's correct, and that's why I made the
2 appropriate adjustment to take that into account.

3 Q Now, Ms. Riley testified that between 2005 and
4 2010, Nokia's financial position had deteriorated due
5 to the introduction of the iPhone, and I think you
6 testified on Friday that you disagree with that?

7 A Well, I'm not saying that their situation wasn't
8 different in 2010, and arguably worse, but they were
9 still doing very well and they were not in a
10 situation where they were being threatened with
11 insolvency or had loans coming due that they couldn't
12 pay. They were still in a very healthy financial
13 condition and were able to take their time about
14 selling whatever assets they wanted to sell,
15 including the 870, which was negotiated over a period
16 of about two years.

17 Q Well, Comcast's purchase was in June of 2010,
18 right?

19 A Yes.

20 Q And at the end of that summer are you aware that
21 Nokia left its CEO go, fired him, more or less, or
22 forced him to resign?

23 A I wasn't aware of that, but that's certainly no
24 reason for selling anything, your assets, at a
25 discount in contravention of your obligations to your

1 shareholders.

2 Q Are you aware that the Wall Street Journal had
3 reported that Nokia had come under pressure to
4 replace the CEO because analyst investors were
5 concerned that Nokia did not have a smart phone to
6 compete with the iPhone or the Samsung?

7 A Well, that wouldn't surprise me.

8 Q And when the CEO was let go at the end of that
9 summer in 2010 he was replaced by a gentleman named
10 Mr. Elop, E-L-O-P. Have you ever heard of Mr. Elop?

11 A That name doesn't ring a bell.

12 Q Have you ever heard of Mr. Elop's famous burning
13 platform?

14 MR. HEIST: Can we pull up Exhibit 9 --
15 Plaintiff's Exhibit 915. This is in evidence so
16 we'll just walk through parts of it.

17 MR. RIOPELLE: Well, can we take it off the
18 screen and establish a foundation that he's seen it
19 before you publish it to the jury, please. I should
20 object. Sorry.

21 THE COURT: Sustained on this record.

22 (Pause in proceedings.)

23 BY MR. HEIST:

24 Q Let's put on -- you haven't heard about the
25 burning platform?

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1 A No, not that I recall.

2 Q But you do know that after Mr. Elop took over,
3 Nokia sold its phone business to Microsoft and
4 switched its focus to networking equipment?

5 A Yeah, it started selling off its assets,
6 including its handset business which it sold for \$7.1
7 billion. It was certainly making good deals in
8 selling off its assets at the best price that it
9 could get.

10 Q All right. Let's put our patent lawyer's hats
11 on.

12 A Where are you going down now?

13 THE COURT: Maybe before we change hats --
14 it's 11:15 -- let's take a ten minute recess.

15 (Jury out, 11:14 a.m.)

16 THE COURT: We're in recess for ten
17 minutes. Ian, do you have a copy of this?

18 AUDIO OPERATOR: Yes.

19 (Recess taken from 11:15 a.m. to 11:33
20 a.m.)

21 THE COURT: Be seated, everyone. You may
22 continue, Mr. Heist.

23 BY MR. HEIST:

24 Q Doctor, I've put my engineering hat back on. I
25 forgot a question.

1 A Okay.

2 Q You agree, do you not, with regard to messaging,
3 as far as cell towers and bay stations are concerned,
4 SMS messages are free riders?

5 A No, I don't agree with that.

6 Q One of the things that you considered in
7 connection with rendering your opinion were
8 proceedings before a subcommittee of the U.S. Senate,
9 correct?

10 A I may have. I don't recall that particular --

11 Q You cited in your expert report, "Cell phone text
12 messaging rate increases and the state of competition
13 in the wireless marking hearing before the
14 Subcommittee on Antitrust Competition Policy and
15 Consumer Rights of the Committee of the Judiciary,
16 United States Senate, June 16th, 2009. Does that
17 refresh your recollection?

18 A It doesn't, but if it's in my report, I certainly
19 looked at it.

20 Q Let me show you a document from that hearing.

21 (Pause in proceedings.)

22 Q First of all, you see that this is a testimony of
23 Joel Kelsey (ph), Policy Analyst from the Consumers
24 Union, to the Senate Judiciary Committee --
25 Subcommittee on Antitrust Competition Policy and

1 Consumer Rights?

2 A Yes, I see that.

3 Q And the Consumers Union, those are the people
4 that publish consumers reports?

5 A That's right.

6 Q Let me direct your attention to page three. The
7 report states, "Since 2005, every major carrier has
8 at least doubled the prices for text messages from
9 ten cents to 20 cents per message. The rising cost
10 in the service is a head scratcher to consumers
11 because text messaging uses less data than almost any
12 other service on a wireless network. 600 text
13 messages contain less data than one minute of a phone
14 call. If we put that into dollars and cents, at 20
15 cents per text, those 600 messages would cost \$120
16 for the equivalent of a one minute phone call." Do
17 you see that?

18 A I do see that, yes.

19 Q And there was concern about the cost of text
20 messaging, and that's what gave rise to this
21 committee, correct?

22 A I don't remember that, but it's certainly
23 possible.

24 Q Let me direct your attention to the next page,
25 page four. The last full paragraph, second sentence,

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1 says, "Sprint was the first to raise its rates to 20
2 cents per message in October of 2007." Do you see
3 that?

4 A I'm sorry, could you just reference me to the
5 paragraph again?

6 Q Page four, last full paragraph, second sentence.
7 "Sprint was the first to raise its rates to 20 cents
8 per message in October of 2007," correct?

9 A Yes, that's what it says.

10 Q And then Mr. Kelsey wrote in the first -- pardon
11 me, the second paragraph of this document, "Text
12 messaging files are very small and the price of their
13 transmission is negligible for the provider." Do you
14 see that?

15 A You said the second paragraph of --

16 Q It's actually -- well, I guess it's the first
17 full paragraph. I'm not sure. The first sentence
18 says, on the same page, page four, says, "Text
19 messaging files are very small..." Are you with me?

20 A Yeah, I see that now. Yeah.

21 Q "...and the price of their transmission is
22 negligible for the provider." And then he writes, "A
23 message travels as a wireless signal from the handset
24 through the wired telephone network and as a wireless
25 signal to the receiving handset. The text message is

1 a free rider inside a so-called control channel where
2 space that is already being used to operate the
3 wireless network. In other words, text message does
4 not use up any extra spectrum once the carrier pays
5 the cost of the underlying infrastructure and storage
6 equipment. Thus, any revenue received by the
7 provider on an incremental text message usage is
8 merely pure profit. Do you see that?

9 A I do see that, yes.

10 Q Now, do you know that SMS messages ride in the
11 control channel?

12 A That's what I've heard, yes.

13 Q And do you disagree with Mr. Kelsey that they are
14 a free rider in the control channel?

15 A I do disagree. I thought I made that clear with
16 my exhibit where we saw the packages going along and
17 what Ms. Riley used as analogy to the control channel
18 and pointed out that once more and more messages go
19 down that control channel then more spectrum is going
20 to be needed to buy that -- needed in order to be
21 able to accommodate that increased traffic in
22 addition to all the other traffic that Sprint carries
23 that it sells in a bundle to consumers.

24 Q So you disagree with the testimony of the
25 Consumers Union that text messages are a free rider?

1 A I do.

2 Q Is that disagreement a technical disagreement or
3 is it an economic disagreement?

4 A It's an economic disagreement. You're not
5 disagreeing that the text messages run in the control
6 channel. The question is how one characterizes it
7 from an economic perspective?

8 A Right, and how to full account for the costs.

9 Q Now, one other question I forgot. That's always
10 a problem with taken breaks. It allows me to go back
11 and remember.

12 THE COURT: Before you go back, we've
13 talked about this document at some length, never
14 identified it on the record. It's PX-900.

15 MR. HEIST: I'm sorry. I'm sorry, Your
16 Honor. I neglected to do that.

17 BY MR. HEIST:

18 Q At the hypothetical negotiation, if I understood
19 your testimony, Nokia and sprint would have both
20 known about the 2010 contract that was entered into
21 five years later between Comcast and Nokia?

22 A No, I'm not alleging that. I'm just saying that
23 the comparable -- that provides a good indication of
24 the value in 2005, but I'm not saying that they did
25 know of it.

1 Q All right. That was one question. No more.
2 Back to our patent lawyer hat.

3 A Okay.

4 Q Cross-licenses. In patent law, a cross-license
5 is an agreement under which two parties each grant a
6 license to the other, each allowing the other to
7 practice their patents, correct?

8 A That's correct, though I don't think that's
9 complete. I don't -- maybe you're going to expand on
10 that a little bit, but it's also possible that the
11 two parties will -- one party will pay the other
12 party in recognition of one party's portfolio being
13 more valuable than the other.

14 Q You saved me my next question.

15 A Okay, great.

16 Q Now, whether there's a payment made, a balancing
17 payment, or whether there's no payment made, in
18 either case, by cross-licensing, each party maintains
19 their freedom to design products that would otherwise
20 infringe their competitors patents, right?

21 A That's correct.

22 Q So when two companies have patents that block
23 each other, a cross-license allows them to break the
24 logjam?

25 A Yeah, though that's not the only basis for a

1 cross-license, but that certainly is one of the
2 things that arises out of it or can arise out of it.

3 Q Therefore, cross-licensing can promote
4 competition and minimize patent lawsuits, correct?

5 A Yeah, I'll agree with that. Reduce lawsuits, not
6 necessarily minimize them, but certainly reduce them.

7 Q Right, if parties enter into cross-licenses, they
8 spend less time doing what we're doing here?

9 A That's correct.

10 Q Now, you estimated last Friday that there were
11 10,000 patents involved in the operation of a
12 cellular network.

13 A I said that there were at least 10,000, and for
14 the purpose of a calculation I did, I used that as a
15 sort of lower bound estimate.

16 Q And when you said operation of a cellular network
17 did you mean there were patents on the handsets?

18 A Yes, there are --

19 Q On these? That's included in the -- in the
20 estimate?

21 A Yes.

22 Q And there are patents on the CDMA and there are
23 patents on the bay stations, et cetera?

24 A That's correct, though, of course, some of those
25 patents, a patent on a particular part of the

1 handset, may also leak over to the equipment and the
2 bay station equipment.

3 Q Now, as far as the actual number of patents, the
4 10,000 number, you cited no published data for that
5 estimate, correct?

6 A Well, I cited published data about the number of
7 standard essential patents for the fourth generation
8 standard, and the number of patents, standard
9 essential patents, for that one -- just the standard
10 essential patents for that one standard is 4,000.

11 Q Okay. And so in the standard essential patents
12 that we're talking about, those are licensed --
13 parties to the standards body have to make their
14 patents available at -- under FRAND terms, F-R-A-N-D?

15 A That's right, the standard central patents it's
16 understood would be made available under F-R-A-N-D,
17 FRAND, or fair and reasonable rates.

18 Q Fair, reasonable, and non-discriminatory?

19 A That's correct.

20 Q And the royalty rates that are paid, if any, on
21 the FRAND patents generally are low, correct?

22 A Well, rates paid on patents in the electronics
23 business are generally low. I don't think that FRAND
24 patents are -- royalty rates on FRAND patents are
25 necessarily low. A valuable FRAND patent would get a

1 high reasonable rate.

2 Q And standards bodies and the standards essential
3 to patents, many of them are cross-licensed, correct?

4 A That's correct.

5 Q And so a company like Sprint, who is buying
6 equipment, phones or network equipment or whatever,
7 many of the patents that are embedded in the product
8 it buys come as a consequence of the cross-licensing
9 protocols that many companies enter into, correct?

10 A So, for instance, you're saying Ericsson and
11 Lucent, for instance, might have cross-licenses that
12 allow them to make the equipment that Sprint buys?

13 Q Right.

14 A Yes, I agree with that.

15 Q And in those cases patents that are incorporated
16 into those products come without an additional
17 royalty to Sprint because they're cross-licensed up
18 above them in the supply chain?

19 A Well, as I said in my testimony on Friday,
20 there's an implicit cost in some of those royalty --
21 or those cross-licenses because companies like Sprint
22 and all these other companies pay -- make R&D
23 expenditures which allow them to generate patents
24 which they use in cross-licenses. So those costs do
25 get carried on to the equipment.

1 Q And in so doing, they promote the progress
2 science have used (indiscernible)?

3 A The cross-licensing does?

4 Q Yes.

5 A Yes --

6 Q Actually, the R&D does.

7 A The R&D certainly does and I -- well, I'd go on
8 to say that the cross-licensing does also.

9 Q Now, no technical expert in this case has
10 testified that there were 4,000 or 10,000 patents
11 directed to the operation of a cellular network,
12 correct?

13 A I don't know. It's just a fact that there are at
14 least that many.

15 Q But Dr. Akl didn't say that.

16 A I didn't hear him say that.

17 Q And Dr. Dwoskin didn't say that.

18 A I didn't hear him say that.

19 Q Mr. Lanning didn't say that.

20 A I don't remember hearing him testify to a number.

21 Q Dr. Polish didn't say that.

22 A I don't -- I don't recall him saying that, no.

23 Q And you're not a technical expert or a patent
24 lawyer, correct?

25 A No, I'm just reporting what is in the -- written

1 down in plain English.

2 Q So when you say there are 4,000 or 10,000 patents
3 directed in the operation of a cellular network
4 you're not suggesting that Sprint is infringing
5 10,000 patents, are you?

6 A I'm saying that they're utilizing pat -- either
7 equipment that incorporates or utilizing themselves
8 as many as 10,000 patents, sure.

9 Q You're saying they're infringing 10,000 patents?

10 A I said they're utilizing, yeah.

11 Q Oh. But they're utilizing them under license?

12 A Either implicit or explicit licenses.

13 Q Right. So they're free to use them as they wish?
14 They're not paying royalties on them as far as we
15 know? There's no evidence in this record that sprint
16 has paid a royalty to anyone under a patent license,
17 correct? You haven't pointed to any in your --

18 A I haven't pointed to any in my testimony, but
19 they do have licenses for -- as I recall, for use of
20 patents, and a lot of the patents that they utilize,
21 of course, are incorporated into products which
22 are -- include patent technology for which they are
23 the sorts of cross-licenses that you suggested.

24 Q Like the patents on this iPhone?

25 A Yes.

1 Q But they don't need a license from Apple to sell
2 these iPhones because they buy the iPhones from
3 Apple, and whatever technology is embedded in here
4 they get to use without further payment other than
5 the purchase price?

6 A Well, yeah, that's not entirely correct because
7 they pay for the telephone, that is Sprint pays for
8 the iPhone, and that iPhone is burdened down with
9 hundreds of dollars of intellectual property
10 payments, including Apple's own research and
11 development.

12 Q And people like me are more than happy to pay for
13 all that technology because we like our iPhones,
14 right?

15 A Right, and Sprint is more than happy to pay for
16 it also.

17 Q Now, you're not suggesting that there are 10,000
18 patents relating to messaging, are you?

19 A No, but there are certainly more than the one
20 that's in this case and they have to be taken into
21 account if you want to do an accurate valuation, and
22 they haven't been taken into account by Ms. Riley.
23 They have not been taken into account.

24 Q You have not stated either in your expert report
25 or in the testimony you've given on this stand,

1 witness stand, that Sprint is infringing any patent
2 other than the 870 patent, correct?

3 A Sorry, could you say it again?

4 Q You haven't stated in your expert report or your
5 deposition or here in court that Sprint is infringing
6 any patent other than the 870 patent that you've
7 assumed for purposes of your opinion, correct?

8 A Well, I did report in my report that there were
9 other patents, for instance, that Sprint has
10 identified as being related to messaging, 23 Sprint-
11 owned patents. But apart from that, I didn't list
12 any other patents.

13 Q And you didn't talk about those 23 patents in
14 your direct examination, did you?

15 A No, I covered what I thought would be adequate
16 for me to make the point that I --

17 Q And --

18 A -- need to make.

19 Q And nobody has testified that any of those 23
20 patents cover anything that Sprint's doing, isn't
21 that right?

22 A That's correct.

23 Q Now, even if there were 10,000 patents that
24 covered messaging, you would agree, would you not,
25 that whether -- and the 870 patent was the only one

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1 that's being asserted, but there were 10,000 others,
2 would you agree that whether a patented feature is
3 small or large is not the right question. Instead,
4 the reasonable royalty analysis should seek to
5 determine the economic value generated by the
6 patented feature relative to the next best
7 non-infringing alternative?

8 A I absolutely agree with that, and that's why it's
9 necessary, for instance, in my automobile example, to
10 determine what benefit is brought to the owner of the
11 car as a result of having the approved tire with the
12 patented technology incorporated into it. You've got
13 to look at what the value is. You can't just count
14 the number of times the wheel goes around.

15 Q Or count the number of patents?

16 A I beg your pardon?

17 Q Or count the number of patents?

18 A Well, you at least have to take into account the
19 number of other patents that are involved and also
20 the relative value of the other patents, the
21 engineering know-how and the equipment at the very
22 least that's necessary to make the system work.

23 Q Now, the last slide you showed the jury last
24 Friday set a damages number of \$67,000 and change,
25 but you never testified that such an amount is the

1 appropriate reasonable royalty the jury should award
2 in this case, correct?

3 A That's correct. I was just showing what happens
4 when you adjust Ms. Riley's calculations using some
5 more reasonable assumptions.

6 Q In fact, your opinion is that the correct amount
7 of the reasonable royalty is \$1.5 million, correct?

8 A That's correct.

9 Q And the reasonable royalty is the floor beneath
10 which the royalty may not fall?

11 A It's the floor -- we -- sorry, it is the floor
12 beneath which the compensation may not fall. The
13 royalty can be -- I think is \$1.5 million --

14 Q Okay.

15 A -- but the payment for the use of technology
16 sometimes is based on what we call a lost profit.
17 But Comcast is not alleging lost profits in this case
18 because they're not actually in this business.
19 They're not losing any market share, for instance, to
20 Sprint.

21 Q You're not suggesting that this jury should write
22 down \$67,000 on their verdict form? Because that
23 would be lower than what even you say is a reasonable
24 royalty.

25 A That's correct, I am not. I am not.

1 Q Now, you made -- in coming up with that number
2 you made some adjustments to Ms. Riley's method of
3 royalty determination, and one of the adjustments
4 that you made compared to what she did is you didn't
5 count 600 billion messages that were sent and
6 delivered by Sprint between 2014 and September 30th,
7 correct?

8 A That's right, I didn't count the number of times
9 the wheel went around and around. I looked at the
10 value.

11 Q All right. And another think you didn't count
12 were messages that were transmitted between -- all
13 the messages that were transmitted between one Sprint
14 subscriber and another, correct?

15 A Well, I think in coming to that \$67,000 number --
16 is that the one we're talking to?

17 Q That's what -- yeah, in that \$67,000 number --

18 A Yeah.

19 Q -- you excluded messages that were sent -- some
20 messages that were sent between a Sprint subscriber
21 and a Sprint subscriber?

22 A I counted -- I excluded the second counting of
23 those messages. So if it was a Sprint messenger to
24 a -- Sprint client to a Sprint client, then I counted
25 that as one transmission, that's correct.

1 Q All right. Now, when a Sprint subscriber sends a
2 message, an SMS message, to an AT&T subscriber Sprint
3 charges the Sprint subscriber for sending the
4 message, correct?

5 A Yes.

6 Q And when an AT&T subscriber sends an SMS message
7 to a Sprint subscriber Sprint charges its subscriber
8 for receiving a message, right?

9 A I believe that's correct, yes.

10 Q They charge coming and they charge going, right?

11 A Yes.

12 Q Now, when a Sprint subscriber sends an SMS to
13 another Sprint subscriber, Sprint charges the sending
14 subscriber for sending the message, correct?

15 A Sorry, what's the predicate again? Sorry.

16 Q When a Sprint subscriber is sending to another
17 Sprint subscriber Sprint is charging the sender for
18 sending the message, correct?

19 A Yes.

20 Q And it's charging the receiving subscriber for
21 receiving the message, correct?

22 A I believe that's correct, yes.

23 Q Coming and going?

24 A Yes.

25 Q But in adjusting for Ms. Riley's number, you

1 excluded one of those two charges?

2 A That's correct. That was one of the adjustments
3 I made for the sake of showing an -- the corrected
4 version.

5 Q And you did that even though Sprint earns revenue
6 on both ends of the transaction?

7 A That's correct.

8 Q And under Comcast's theory of the case, there's
9 an infringement and a lookup done into a database for
10 the outbound message in the SPS, correct?

11 A I think that's correct.

12 Q And under Comcast's theory of the case, there's
13 another infringement that takes place on the
14 receiving side when there's a lookup done in the HLR,
15 correct?

16 A Well, I don't recall exactly what happens or what
17 we're thinking about happens, what would be the
18 contention, back when I wrote my report.

19 Q So Comcast's theory of the case is there are two
20 lookups and two acts of infringement, but you've only
21 counted one?

22 A That's right. I think there were technical
23 reasons why that was a reasonable thing to do, though
24 it's not -- it's not that big a deal actually in the
25 overall calculation of damages.

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1 Q Let's put on our patent lawyer hats. On Friday,
2 you spent a great deal of time talking about the
3 patent citation analysis, correct?

4 A Yes.

5 Q I went through the transcript and I counted 36
6 questions that you were asked about that topic. Does
7 that sound about right? You spent a lot of time on
8 it?

9 A I spent a fair amount of time on it, yes.

10 Q To me, the most interesting question was the
11 first one. You were asked whether you based your
12 opinion on the citation analysis. And you said no.

13 A That's correct. I used it to corroborate the
14 results -- the reasonableness of the \$1.5 million
15 considering the apparent relative value of this
16 patent.

17 Q But even if there was no citation analysis, we
18 had never even heard the term, didn't think about it,
19 your number would still be \$1.5 million in this case?

20 A I'm not sure that that's true.

21 Q Are you --

22 A I'm not sure --

23 Q Are you relying on it or aren't you relying on
24 it?

25 A Well, I said I'm relying on it for corroboration.

1 If there had not been corroborating evidence that
2 indicated that this patent was very valuable, wasn't
3 even looked at very much, then I would be less
4 confident of my number, but I'm now very confident of
5 my number as a result of that analysis.

6 Q Well, I guess, unfortunately, that means we got
7 to send a little bit of time on the forward citation
8 analysis. You testified that there's a correlation
9 between the number of times a given patent is cited
10 by later patents and the value of that given patent?

11 A That's right. There's a strong relationship
12 between those two variables.

13 Q So -- just so we're clear, correlation means the
14 number of citations is correlated to value, correct?

15 A Yes.

16 Q And, conversely, value is correlated to the
17 number of citations? It goes both ways, right?

18 A Well, that's the causation, that's right. As I
19 said on my analysis or my direct testimony, one of
20 the reasons why I'd expect to see this is because
21 people tend to read and look up valuable patents.

22 Q Well, let's talk about how patents get cited
23 against later patents. You agree that the value of a
24 patent is determined by the scope of the claims?

25 A That's one thing that you look at, the scope of

1 the claims, and what's described over and above the
2 previous -- or what we call the prior art.

3 Q Well, in terms of the scope of the claims, that's
4 what we've been focused on here for now going into
5 our third week. What does this patent cover, the
6 870? What do the claims cover? What do they
7 embrace? And that's really an important question for
8 this jury to decide, correct?

9 A That's correct.

10 Q Now, do you have any experience with the work of
11 patent examiners?

12 A Well, I've talked to patent examiners. I had
13 them come into my office and explain to us what it is
14 that they do so we get a better understanding of why
15 it is that this correlation exists. It's not a
16 correlation that I discovered, but in order to help
17 me and my staff understand it better, I have talked
18 to patent examiners.

19 Q But you were never a patent examiner?

20 A No, I've not been one, no.

21 Q In May, it will be 47 years since I started as a
22 patent examiner. It's a long time ago and it's been
23 a long and winding road to come here. Patents are
24 cited by examiners and others for what they teach?

25 A That's right, and what they -- as I understand

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1 it, what they teach that's related to the subject
2 matter of the patent that's being applied for.

3 Q They're cited for what they teach and not what
4 they claim, correct?

5 A That's correct, though what's in the claim and
6 what they teach are obviously related.

7 Q They're related, but they're not the same, isn't
8 that right?

9 A That's correct.

10 Q And the number of forward citations, therefore,
11 is a reflection on what patents teach, and not
12 necessarily what they claim? Do you agree with that?

13 A Well, I'm not sure that I do agree with that, but
14 certainly what's taught is strongly related to the
15 claims, and in I'd imagine many instances it's the
16 same.

17 MR. HEIST: Mr. Dyer, may we please have
18 deposition transcript page 213, line 14 through 18?

19 (Pause in proceedings.)

20 THE COURT: What deposition? When taken?

21 MR. HEIST: This is Dr. Cox's deposition
22 taken I think it was April 1 of last year. April 1,
23 2016.

24 BY MR. HEIST:

25 Q But the number of forward citations, therefore,

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1 is a reflection on what patents teach and not
2 necessarily what they claim, is that correct?

3 A That's consistent with my understanding.

4 Q Now, so when a patent examiner cites earlier
5 patents against the later patent application he or
6 she cites the teachings of the specification of the
7 patent and not the claims, correct?

8 A Yes, that's correct.

9 Q So let's look at Plaintiff's Exhibit 2, the 870
10 patent.

11 (Pause in proceedings.)

12 Q So we see here that the patent was granted on
13 April 26th, 2005.

14 MR. HEIST: Can we blow it up?

15 BY MR. HEIST:

16 Q And when this patent was granted it was
17 classified in -- if you go down to line 52 on the
18 left column, it was classified in class 455, subclass
19 466. Do you see that?

20 A That's true. That's the United States Patent
21 Office classification. Now, the United States Patent
22 Office also uses the international patent
23 classification, which is in the line above.

24 Q Right. But let's just focus for a moment on the
25 U.S. classification. So what that means is there is

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1 a class of technology, maybe it's messaging. Class
2 455, I'm not sure what that is. Subclass 466 is some
3 narrower subset of patents in that field. And the
4 patent when it was granted on April 26th, 2005, was
5 classified in that technological field, 455/466,
6 correct?

7 A Right, those are the two major ones that it --
8 it's classified -- it was classified in, as indicated
9 by the bolding.

10 Q Now, today, the patents are classified in the
11 Patent Office electronically. They have electronic
12 files. Back when I was an examiner they put them in
13 drawers, and the drawer was labeled "455/466."

14 MR. RIOPELLE: Your Honor, I appreciate
15 that -- objection. I appreciate that he may have had
16 a prior career, but I believe his testimony and
17 question about how he practiced as a patent examiner
18 is irrelevant.

19 MR. HEIST: Let me rephrase the question.

20 THE COURT: I think it best if you stay
21 away from that reference.

22 MR. HEIST: Okay.

23 THE COURT: To the extent I heard an
24 objection, it is sustained.

25 BY MR. HEIST:

1 Q Let me re -- let me rephrase that question.

2 A sure.

3 Q When the patent was granted it went into a file,
4 physical, electronic, whatever, classified "455/466,"
5 right?

6 A Well, all -- that's the way it was labeled. I
7 guess I don't know what was actually done to it in
8 that regard.

9 Q So beginning on April 26th, 2005, if the patent
10 examiner was presented with a patent application
11 filed by somebody else and he wanted to look for
12 relevant prior art, he could go to class 455/466, and
13 from that date forward, if he looked in that file,
14 the examiner would find the 870 patent in there,
15 correct?

16 A That's true, though that presume -- well, I know
17 that's not the only way patents are searched for
18 prior art.

19 Q But that's one way that the examiner could find
20 it?

21 A I -- it certainly is one way. I don't know
22 whether that's what they do or not.

23 Q Now, if the examiner is looking in that class and
24 subclass for a prior art reference, what he cares
25 about is what's described in specification and

1 drawings of the patent? That's really what he
2 focuses on, isn't that so?

3 A Well, I would disagree with that.

4 Q You would?

5 A Yes.

6 Q What does he look for?

7 A Well, he's also looking at the claims in previous
8 patents to see what the difference is between any
9 claim in the prior art and the claims that are being
10 made in the patent application. And frequently,
11 as -- you know, patent examiners suggesting rewarding
12 of the claim so that there is this distinction
13 between the current patent application and the
14 previous prior art.

15 Q You're saying the examiner searches the claims of
16 the reference or does he -- does he look at the
17 claims of the pending application?

18 A He will look at claim -- he or she will look at
19 other claims of prior patents to make sure that what
20 is being claimed in the current application is
21 different from the previous application, and they
22 will suggest changes of wording in the application in
23 order -- in the patent claim in order to make sure
24 that there is a distinction between the patent
25 application and the previous patent.

1 Q How did you come to that understanding?

2 A Well, I've looked at what's called the file
3 rapper, and you can see that they're letters from the
4 examiner to the applicant saying I'd suggest you
5 change this wording, otherwise, I can't grant this
6 patent.

7 Q Wording of the application, not wording of the
8 patent? Once the 870 patent was granted, it's claims
9 were fixed, right?

10 A Oh, that's right, but we were talking about
11 looking at claims of prior art I thought when the 870
12 was being applied for.

13 Q Now when you did your study, your forward
14 citation study, of the 870 patent you found that it
15 had been cited four times, correct?

16 A That's right, just four times, compared to the
17 median which was 12 for --

18 Q And --

19 A -- other similar patents.

20 Q And you did your study at the time you did your
21 expert report, which was a little more than a -- a
22 little over a year ago, correct? I'm not sure when
23 you were --

24 A Yeah, it was actually more like -- yeah, 18
25 months, yeah.

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1 Q Have you done a -- have you tried to update that
2 analysis to see how many times the 870 was
3 patented -- was cited, if any, between the time of
4 your study and today?

5 A Well, I haven't done any study. I do notice that
6 there was another patent that cited the 870, but I
7 didn't have time or didn't go back and look to see
8 whether any -- if there had been any similar changes
9 to the 8,000 other patents that were generated about
10 the same time.

11 Q But you do know that after you did your work, the
12 870 patent was cited again?

13 A By one more patent. And, of course, as I said,
14 presumably, the same thing happened to others.

15 (Pause in proceedings.)

16 MR. HEIST: Could we see PX-910?

17 (Pause in proceedings.)

18 BY MR. HEIST:

19 Q Do you see this as a -- recognize this as a
20 printout from Google Patents?

21 A Yeah, this is a Google Patent printout --

22 Q And --

23 A -- not the Patent Office printout.

24 Q No, but it's the Google Patent's printout for the
25 870 patent. I'll represent to you that we did this

1 last Thursday night. Can we just direct your
2 attention to page 20 of the exhibit? And you'll see
3 "cited by." Do you see that?

4 A Yes, I see that.

5 Q And you see that the 870 patent has now been
6 cited seven times?

7 A That's what the Google cite says, though two of
8 these are patent applications. So if you go back to
9 the Patent Office cite, you will see that it's been
10 cited five times, that it's these seven minus the two
11 applications. So it's actually only been cited one
12 more time --

13 Q Okay.

14 A -- by a patent, which is what the methodology
15 calls for.

16 Q And two of those citations are by Nextel
17 Corporation, correct?

18 A That's correct.

19 Q And not Sprint?

20 A That's correct.

21 Q Now, let's go back to the 870 patent, PX-2. And
22 let's look at line 65 in the left-hand column, "Prior
23 Publication Date." Do you see that?

24 A Sorry. Yes. I see that, yes.

25 Q And under that is a reference, "US2001/0005675A1

1 June 28th, 2001," correct?

2 A That's correct.

3 Q That tells us that in 2001, the application for
4 the 870 patent was published by the U.S. government,
5 correct?

6 A I think that's a fair way to characterize it,
7 yes.

8 Q And that's almost four years before the patent
9 was granted, correct?

10 A That's correct, yeah.

11 Q Let's take a look at Defendant's Exhibit --
12 pardon me, PX-913. It's a copy of that publication.

13 MR. HEIST: And if we could put it up on
14 the screen side by side with the patent.

15 (Pause in proceedings.)

16 BY MR. HEIST:

17 Q We see that the inventor's name is the same, that
18 the application number is the same. We see the
19 publication number at the top on the right, that's
20 the number that we see in line 65 in the patent on
21 the left, correct?

22 A Yes, I see that.

23 Q And let's just compare the first page of the
24 drawing of the two documents. It's going -- this is
25 the front page of the patent. Now let's move on to

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1 the drawing on the next page.

2 THE COURT: What are the two exhibits you
3 have on the screen?

4 MR. HEIST: PX-2, page three, on the left.
5 PX-913, page two, on the right.

6 BY MR. HEIST:

7 Q You see that the drawings are the same?

8 A Yeah, they are.

9 Q And we could go through the rest of this and
10 show, could we not, that the patent on the left and
11 the publication on the right disclose the same thing,
12 right?

13 A I'm not sure they show exactly the same thing,
14 but they would be similar.

15 Q Very similar. Let's go and look at the first
16 column of the specification in both.

17 (Pause in proceedings.)

18 MR. HEIST: Let's blow up the first
19 paragraph, "Field of the invention..."

20 (Pause in proceedings.)

21 BY MR. HEIST:

22 Q So we see the comparison between the two. We see
23 that the publication is of the same invention as the
24 patent, correct?

25 A Yeah, I see that.

1 Q Now, when the publication, PX-913, the document
2 on the right, was published it was also put in the
3 class or electronic file or drawer, if you will, of
4 class 455, subclass 446.

5 MR. HEIST: Let's go back and look at the
6 front of Plaintiff's Exhibit 913. Let's blow up the
7 classification.

8 BY MR. HEIST:

9 Q So if you look at line 52, you'll see that the
10 publication was classified in class 455, subclass
11 466, correct?

12 A Well, I'm glad I raised this earlier. There are
13 two classifications or several sets of
14 classifications, and the Patent Office usually picks
15 one or two that are the primary classification. It's
16 actually changed in classification here in terms of
17 the primary classification. So it's now 455/412.

18 Let me just --

19 Q All right.

20 A -- look at one other thing here. And I don't
21 know what the international patent classification,
22 whether that changed also.

23 Q Well, my point is this -- a copy of this
24 publication was found, among other places, in class
25 455/466 on June 28th, 2001, correct?

1 A Well, I don't know if "found" is the right word,
2 but it certainly was classified that way. That
3 was --

4 Q Was classified --

5 A That was one of the classifications, yes.

6 Q So between June 28, 2001, and April 26, 2005, an
7 examiner who was looking for prior art who went into
8 class 455/466 would find the publication on the
9 right, PX-913, but he wouldn't find the patent on the
10 left because the patent hadn't been granted yet?

11 A That's correct.

12 Q And if he wanted to cite against a late patent
13 application, he wanted to cite the invention of Ms.
14 Aho, the only thing he could cite during that period
15 was the publication on the right because the patent
16 hadn't been granted yet, correct?

17 A That's correct, and that's why you have to do
18 that time normalization that I talked about in my
19 previous analysis. And I looked at the issue of this
20 prior patent also and it doesn't affect my opinion.

21 Q Well, your forward citation search or analysis
22 did not look for the number of times the publication
23 on the right was cited. It only looked for the
24 number of times the patent on the left was cited,
25 isn't that right?

Dr. Cox - Cross

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1 A That's why I described it in my report, though
2 what you also have to do is since you -- it's like
3 basic math, right? If you do something to the
4 left-hand side of the equation, you have to do the
5 same thing to the right-hand side of the equation.
6 And so when I looked at this I also made the time
7 calculation or the date adjustment for the earlier
8 patent and came up with the result that was very
9 similar to the one that I reported earlier in my
10 testimony.

11 Q Let me show you Plaintiff's Exhibit 911.

12 (Pause in proceedings.)

13 Q Do you recognize Plaintiff's Exhibit 911 as the
14 published application printed out from Google that
15 we're looking at here? It's the same patent
16 publication as Plaintiff's Exhibit 913, right?

17 A Well, it's the Google version of that. It's not
18 the Patent Office version.

19 Q But if we direct your -- if I direct your
20 attention to page 26, could you tell the jury how
21 many times the patent publication was cited?

22 A Well, I can't tell the jury how many times the
23 patent was cited by the later patent because that's
24 not listed separately as the methodology requires. I
25 can tell you though that what Google reports is that

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1 there is a combination of patents and applications,
2 73 of those that are patented, but I will note that a
3 very large number of them are patent applications.
4 And, furthermore, I don't have any basis to know
5 whether 73, even if it was the correct number, was a
6 large number, because I need to look at what happened
7 to all the other patents that claim priority for June
8 of 2008.

9 Q But Google Patents is reporting --

10 A 2001.

11 Q Google Patents is reporting that this publication
12 that we just looked at, PX-913, has been cited by 73
13 subsequent patents, correct? That's what it says?

14 A No, it doesn't say that.

15 Q Let's take a look at page 26.

16 A Of 911?

17 Q 911, 26.

18 A I'm there.

19 (Pause in proceedings.)

20 Q This shows a citation by Ericsson on second -- on
21 page 26, second from the bottom?

22 A Yes, I see that.

23 Q Next page, Blackberry?

24 A Also second from the bottom, yes.

25 Q And the next page, Samsung? At the very top?

Dr. Cox - Cross

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1 A Yeah, that's an application, but there's
2 Samsung's name on it.

3 Q You mean it's a Samsung application that cited
4 this publication?

5 A Yes.

6 Q All right. So let's go to that same page cited
7 by Nokia one, two, three, four, five times.

8 (Pause in proceedings.)

9 A I see the fifth. Yes, though, again, not all of
10 those are patents.

11 Q No, some of them are cited by patent applicants.

12 A Yes, which may or may not become patents.

13 Q Right, but there -- there's Nokia telling the
14 government here is a relevant piece of prior art, Ms.
15 Aho's published patent application, correct?

16 A That's correct.

17 Q Take a look at it.

18 A Yes, that's correct.

19 Q And on the next page it's cited by Intel and
20 Openwave. The following page, Huawei, Core Wireless,
21 Motorola?

22 A Right, and if you look at these -- do this
23 calculation today and look at the number of patents
24 that actually cite this patent application, you'll
25 see that the number is relatively low compared to

1 other patents issued at the same time.

2 Q Okay. But my point is none of those citations
3 have shown up in your analysis of the 870 patent?
4 You only found four citations?

5 A That's right, the patent that was ultimately
6 accepted by the Patent Office has only been cited
7 four times. And I applied the methodology in the
8 manner that it's described in books or in the papers
9 I discussed, and that was the result that came up.

10 Q Now, after your testimony on Friday, I got to
11 thinking, if the number of citations correlates to
12 value, then value must correlate to the number of
13 citations, and I think you already agreed to that,
14 right?

15 A That's right.

16 Q So I decided to look for some patents that we
17 could all agree to be valuable. And one of the
18 places that I started was what I believed to be a
19 patented case that you've heard about, Kodak -- or
20 pardon me, Polaroid versus Kodak. You've heard of
21 that case?

22 A Yes.

23 Q And until recently, that was the largest single
24 judgment in a patent case in the history of the
25 United States, correct?

Dr. Cox - Cross

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1 A That's correct, yes.

2 Q \$926 million?

3 A That sounds right.

4 Q And there were several patents in that case,
5 right?

6 A I'll take your word for it. I can't remember,
7 actually.

8 Q Three of the patents were granted to Edwin Land,
9 correct?

10 A Yes.

11 Q And those of us here who are of a certain age
12 will remember the Land camera, the Polaroid Land
13 camera, and other people don't remember cameras
14 before they were on their phone, but let's just talk
15 about Edwin Land. He's in the Inventors Hall of
16 Fame, right?

17 A That's right.

18 Q And he was awarded, based on what I could tell,
19 535 patents, compared to 1,097 that were awarded to
20 Thomas Edison, about half the same number -- half the
21 number that were awarded to Edison.

22 A Okay.

23 Q And three of his patents were litigated in that
24 case that brought in the \$926 million judgment?

25 A I'll accept that.

Dr. Cox - Cross

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1 Q And we can go through it. And if you want, I
2 will. But would it surprise you to learn that Mr.
3 Land's patents, all three of them that were involved
4 in that lawsuit, were cited a grand total of 37
5 times?

6 A Well, I would not be surprised, but, of course,
7 just looking at the raw numbers, it is not enough,
8 for one thing, because you have to make corrections
9 for the number of times all the other patents that
10 were issued about the same time. It may well be that
11 those patents are in categories that -- in which
12 patent -- in which there's not that much citation
13 done. And second of all, my correlation is based on
14 the value as determined by the market, rather than
15 just the outcomes of litigation.

16 Q Okay. Let's talk about your opinion. \$1.5
17 million paid up lump sum, life of the patent,
18 correct?

19 A Yes.

20 Q And the patent doesn't expire until 2023?

21 A That's correct.

22 Q And in reaching that opinion you made no estimate
23 of how many messages Sprint would send and deliver
24 between now and patent expiration, correct?

25 A That's correct.

Dr. Cox - Cross

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1 Q Now, in other cases in which you have represented
2 a patent owner you did make an estimate in
3 determining a lump sum. You made an estimate of the
4 usage over the life of the patent and discounted it
5 to present value and put it right in your expert
6 report, correct?

7 A I probably did, yes.

8 Q But you didn't do that here?

9 A No, for the reasons I described earlier.

10 Q And \$1.5 million is less than what parties
11 typically spend on patent litigation just through the
12 discovery phase of the case and not including trial,
13 isn't that right?

14 MR. RIOPELLE: Objection, relevance.

15 THE COURT: Sustained.

16 BY MR. HEIST:

17 Q What is the most that Sprint charged its
18 customers during the damage period to send or receive
19 an SMS message as far as you know?

20 A I think it's in the neighborhood of 15 cents.

21 Q Comcast isn't asking for a royalty of a penny,
22 correct?

23 A That's correct.

24 Q It's not asking for a royalty of a tenth of a
25 penny?

1 A That's correct.

2 Q It's not asking for a royalty of a 100th of a
3 penny?

4 A That's correct.

5 Q Rather it's asking for a royalty of five -- a
6 little more than 5/1000ths of a penny for SMS and a
7 little more than 6/1000ths of a penny for SMS, is
8 that right?

9 A That's right, it's asking for all of that without
10 making reference to all the other things that go into
11 making SMS messaging possible.

12 Q And meanwhile, the royalty you're proposing is
13 about roughly 100 times smaller than what Ms. Riley
14 is proposing? She's proposing \$153 million. You're
15 proposing \$1.5 million. So it's about a factor of
16 100 to one?

17 A Right, though mine is several times greater than
18 what Nokia actually sold this patent for.

19 Q Right. Your view is that a reasonable royalty
20 here for the messages that have already been sent is
21 one-hundredth, approximately, of what -- on a per
22 message basis, one-hundredth of what Ms. Riley's
23 asking for?

24 A That's what the comparables indicate.

25 Q And your proposal is one in which Sprint can send

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1 and deliver as many messages as it wants before the
2 patent expires in 2023 and not pay a penny, not one
3 more cent beyond \$1.5 million?

4 A That's the reasonable contract, reasonable
5 agreement, that they would have come to, yes.

6 MR. HEIST: No further questions, Your
7 Honor. May I mark my two drawings, the balance
8 sheet and income statement, as Plaintiff's Drawing 10
9 and 11?

10 THE COURT: You may.

11 (Pause in proceedings.)

12 MR. HEIST: Thank you, Your Honor. And
13 thank you, Dr. Cox.

14 THE WITNESS: Thank you, Mr. Heist.

15 THE COURT: How long will your redirect be,
16 Mr. Riopelle?

17 MR. RIOPELLE: I'd be surprised if I exceed
18 ten minutes.

19 THE COURT: All right.

20 MR. RIOPELLE: But never trust a lawyer on
21 his estimation of time.

22 THE COURT: I'm trusting you. We'll recess
23 in ten minutes.

24 MR. RIOPELLE: Fair enough.

25 REDIRECT EXAMINATION

1 BY MR. RIOPELLE:

2 Q Let's turn first to the topic of 10-Ks. Do you
3 remember those questions from Mr. Heist?

4 A I do.

5 Q Okay. What is the purpose of a 10-K?

6 A It's a report to the Securities and Exchange
7 Commission on the balance statement and income
8 statement and other factors that would have an impact
9 on the comp -- on the profitability of the company.

10 Q And are there certain rules that apply to filing
11 of a 10-K?

12 A Yes, you have to comply with what's generally
13 known as GAAP, or generally accepted accounting
14 principles.

15 Q And would a 10-K have a valuation in it for a
16 specific patent?

17 A No.

18 Q And would a 10-K apply the same rules that this
19 jury must apply for determining a reasonable royalty,
20 if they have to determine a reasonable royalty?

21 A No, they would not.

22 Q So, for example, would a 10-K have a hypothetical
23 negotiation?

24 A No, it wouldn't.

25 Q And would a 10-K have in it -- would it consider

1 what's known as the Georgia-Pacific factors?

2 A No.

3 Q And one more question on this. Do you remember
4 the -- I guess a P&L statement or the -- you had the
5 spectrum listed as an asset. Do you recall that?

6 A Yes.

7 Q The fact that it's listed as an asset there, does
8 that mean that it wasn't a cost to the company?

9 A Oh, definitely not.

10 Q I'm going to turn to another topic. You were
11 talking -- you had questions this morning about
12 Sprint's keeping records. Do you recall those
13 questions? Let me -- let me try to refresh your --

14 A Thank you.

15 Q It was about keeping the records related to
16 messaging and voice and data as far as a bundle.

17 A Yes.

18 Q Do you recall that?

19 A Yes.

20 Q Are you saying that Sprint kept inadequate
21 records?

22 A No, not at all. I'm just saying that they
23 can't -- that they don't have reference -- revenue
24 that they can attribute directly to messaging, as
25 opposed to voice or data.

1 Q Okay. Now I want to go back to the topic of a
2 lump sum. And you -- to refresh, it's your opinion,
3 correct, that Sprint and Nokia would have agreed to a
4 lump sum for the life of the patent at the
5 hypothetical negotiation, correct?

6 A That's correct.

7 Q And your opinion is based I believe on license
8 agreements that you reviewed in this case?

9 A Yes, and my conversation with counsel at Sprint.

10 Q Mr. Ball?

11 A Mr. Ball, yes.

12 Q And didn't -- did you testify on Friday that your
13 opinion that Sprint and Nokia would have agreed to a
14 lump sum for the life of the patent was also based on
15 other license agreements that you had reviewed in
16 your experience?

17 A Yes.

18 Q And do you also -- did you also testify that your
19 opinion they would have agreed to a lump sum is based
20 on the industry practice, based on your experience?

21 A Yes.

22 Q And in preparing for your testimony in this case,
23 have you seen other Sprint agreements in preparing
24 for your testimony?

25 A I believe I have, yes.

1 Q And were all of those agreements lump sum
2 payments?

3 A I don't know if they all were, but I believe most
4 of them were --

5 Q And --

6 A -- if not all.

7 Q -- have you seen any Nokia agreements in this
8 case that were not for a lump sum agreement?

9 A No.

10 Q And why would parties like Sprint and Nokia agree
11 to a lump sum, a lump sum agreement for the life of
12 the patent?

13 A Well, it just is administratively a lot easier.
14 When the -- if the company can just sign a check and
15 then not have any further relations with the patent
16 owner, that makes it a lot easier for both parties.
17 Otherwise, we get into situations where the licensee
18 might have to account for all of the -- or provide an
19 accounting to the patent owner of, in this case, the
20 messages that were sent. And then, you know,
21 sometimes those audits are -- or those accountings
22 are challenged and it just creates a lot of
23 transactions costs for an amount of money that might
24 not make those transactions costs worthwhile.

25 Q And sometimes when there is a running royalty is

1 there sometimes what's known as an audit process?

2 A Yes, that's what I was referring to. You have
3 to -- you have to report what you've been doing that
4 might infringe the patent or that is covered by the
5 patent, and then frequently there are challenges to
6 what -- to those reports.

7 Q So in this instance if there was an ongoing
8 royalty between Sprint and Nokia would it be your
9 understanding that Nokia would have the right to come
10 in and audit Sprint's books and records?

11 A That's correct.

12 Q And so to eliminate -- my understanding is in
13 your opinion, that to eliminate that need for
14 auditing would be one of the reasons that Sprint and
15 Nokia may agree to a lump sum payment for the life of
16 the patent.

17 A That's correct. That's what I was trying to say.

18 Q And last, just going back to the hypothetical
19 negotiation -- I believe Mr. Heist just established
20 this -- it's your opinion that Sprint and Nokia would
21 have agreed to a payment for \$1.5 million, correct?

22 A That's correct.

23 Q Now, I believe when you are looking at the
24 valuation of the patent that was sold you came up
25 with the number of \$300,000, correct?

Dr. Cox - Redirect

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1 A Yes, that was the highest value that you could
2 possibly infer from the \$600,000 sale price for the
3 870 patent.

4 Q And then do you remember Mr. Heist asking you
5 questions about at the hypothetical negotiation you
6 have to assume that the 870 patent is valid and
7 infringed, right?

8 A Yes, that's right.

9 Q And then -- but at the time that Nokia sold the
10 patent to Comcast there was no assumption at that
11 point that the patent was valid and infringed,
12 correct?

13 A That's correct.

14 Q So is that difference between those two
15 assumptions, is that what led you to increase the
16 valuation from \$300,000 in the Nokia-Comcast
17 purchase --

18 THE COURT: It's a great speech --

19 MR. RIOPELLE: Oh.

20 THE COURT: -- but it's not --

21 MR. RIOPELLE: Sorry.

22 THE COURT: -- but it's not a question.

23 MR. RIOPELLE: I was getting there. I'll
24 get there. Okay, I'm sorry.

25 BY MR. RIOPELLE:

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1 Q Why did you increase the price of \$300,000 to an
2 opinion of \$1.5 million that would have been agreed
3 at the hypothetical negotiation?

4 A Well, that is in order to take into account the
5 difference between the hypothetical negotiation and
6 the situation at the actual sale price. Because
7 there was some probability that the patent was
8 invalid and not infringed, there would have been a
9 discount at the time of the sale in 2010 to reflect
10 that possibility, and that's why I increased the
11 \$300,000 estimate, which in my opinion is already way
12 to high by a factor of five in order to take into
13 account that uncertainty.

14 MR. RIOPELLE: No further questions, Your
15 Honor.

16 MR. HEIST: Just two, Your Honor. I'll be
17 very quick.

18 RECROSS-EXAMINATION

19 BY MR. HEIST:

20 Q You say that the parties to the hypothetical
21 negotiation wouldn't have agreed to a running royalty
22 because of the difficulty in auditing and figuring
23 out the compliance?

24 A Yeah, that's one of the reasons. I said they
25 would have agreed to a lump sum for those

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1 considerations, for those concerns.

2 Q But there's no issue in this case as to the
3 number of messages sent and received, correct?

4 A That's correct.

5 Q And Sprint doesn't have any trouble keeping track
6 of how many messages are sent and received when they
7 want to put the charge on your bill, do they?

8 A That's correct. I'm just saying that it's
9 complicated -- it's a lengthy situation to try and
10 add all of that stuff together then make a
11 representation about the amount of time that you sent
12 a message.

13 Q Yeah. What they would have to do is take \$2.66
14 trillion and multiply it by the revenue per message,
15 that's it, right?

16 A By the royalty rate.

17 MR. HEIST: No further questions.

18 THE COURT: I think that means your
19 testimony is at an end, Dr. Cox. Thank you.

20 THE WITNESS: I'm dismissed?

21 THE COURT: Yes -- well, not dismissed.
22 You may step down.

23 THE WITNESS: Okay, thank you.

24 (Witness excused.)

25 THE COURT: Ladies and gentlemen, it's

1 12:40. We'll be in recess for an hour. My noon-day
2 instructions. Do not discuss the case among
3 yourselves. We're getting close to the end. Resist
4 the temptation. I've told you why. If anyone tries
5 to talk to you about the case, say nothing to them.
6 Report that to me. Be sure to take your juror
7 notebooks and your binders into the jury room. See
8 you back here at 1:40.

9 (Jury out, 12:40 p.m.)

10 THE COURT: Be seated, everyone. Mr.
11 Heist, I'm going to return to you the exhibits you
12 used in cross, the Wilson deposition, the two Google
13 Patent searches, and the transcript of the
14 testimony -- excuse me -- before the Senate Judiciary
15 Committee. Anything else we have to address before
16 lunch?

17 MR. GOETTLE: No, Your Honor.

18 MR. RIOPELLE: No, Your Honor.

19 THE COURT: We'll be in recess for now. Go
20 about your business, everyone.

21 (Luncheon recess taken, 12:42 p.m.)

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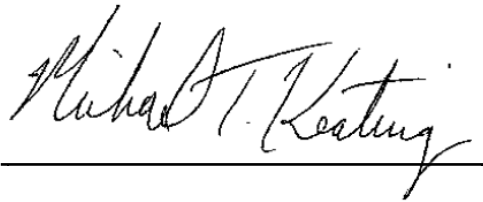
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CERTIFICATION

I, Michael Keating, do hereby certify that
the foregoing is a true and correct transcript from the
electronic sound recordings of the proceedings in the
above-captioned matter.

2/14/17

Date

A handwritten signature in black ink, reading "Michael T. Keating". The signature is written in a cursive style with a horizontal line underneath it.

Michael Keating